

CACTUS COURIER

Newsletter of the Palomar Cactus and Succulent Society

Volume 58, Number 2

February 2012

The Meeting is the **4th** Saturday

FEBRUARY 25, 2012

**Joslyn Senior Center
724 N. Broadway, Escondido**

12 NOON



↑ *D. pulverulenta* (Steve Mudge)



Santa Cruz Island



“Dudleyas”

•• Kelly Griffin ••

This month's talk by **Kelly Griffin** is a view of Dudleyas that are less often seen. Dudleyas as a group are fairly interesting but most of them occur in areas not dense with succulent plants of other genera; therefore they often are not so well known. There are some truly

fantastic habitats where these do occur and he will share that too.

Kelly will also show some previews of the last trip he made to Mexico last month.



D. ingens (Michael Buckner)



D. anthonyi, San Quintin (Tim Hauf)

Kelly works for **Rancho Soledad Nurseries** as the Curator of Xeric Plants. Along with his business partner, Allen Repashy, he runs **Xericgrowers**, specializing in propagation of unique cultivars and select forms of succulent plants. Kelly's hybrid aloes are well

known in the industry and are collected by enthusiasts worldwide. He has led many expeditions for the nursery including South Africa, Madagascar, Yemen, Socotra, Argentina, Chile, Bolivia, Mexico, and Peru.

"I am currently the curator of succulent plants at Rancho Soledad Nurseries or as I call it Plant Disneyland! It is located in Rancho Santa Fe (at 18539 Aliso Canyon Road). We have two display gardens and many, many interesting plants. We are updating our web page so look for it at: www.ranchosoledad.com

Also check out the new on-line succulent plant forum: www.Xericworld.com

I have posted some of my pictures there to share and there is so much information exchange about these plants we love. It's definitely worth a look."



BOARD MEETING • PLANT SALES • BRAG PLANTS • EXCHANGE TABLE



REFRESHMENTS

Gloria Medina

Mike Regan

Beth Bradsher

Doris St. John

[Your Name Here!!!]



Cactus:

- 1st *Hatiora salicornioides* ??
Annie Morgan
- 2nd *Mammillaria ritteriana*
Peter Walkowiak
- 2nd *Parodia hasslebergii*
Peter Walkowiak

*Brag Plants
January 2012*



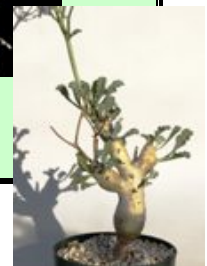
Succulents:

- 1st *Pelargonium glaucifolium*
John Barkley
- 2nd *Pelargonium alternans* from seed!
Rudy Lime
- 3rd *Pelargonium sp.*
John Barkley



February Plant of the Month

"Pelargoniums"



PRESIDENT'S MESSAGE for FEBRUARY

Last month was going to be my first message to the membership but due to health issues this will be my first. This is my sixth year as a member of this club. The club has grown dramatically in that time. It was around 60 then, we are now at around 120 today. There have been many changes over the years, we no longer do the Del Mar Fair (was a primary source of our revenues for the club), and we have a spring plant sale and an official succulent plant show and sale at a great venue, The San Diego Botanic Garden. These two events will become the major revenue sources for our club with your help and participation. The brag table is being transformed into a sharing and participation table, with more opportunities for the membership and greater rewards for participants.

You notice that I use the word, participation several times in the previous paragraph. That is going to be my overriding goal this year is to increase member participation. The first event we will need help with is the Spring Succulent Plant Sale to be held at the Alta Vista Garden in Vista, May 19th We will need help with transportation and pricing of donated plants, set up on Friday the 18th. Lunch on Saturday is potluck, plan on bringing a dish to share. I will be giving a comprehensive talk on succulents, from soil to staging from ten to eleven thirty. After lunch there will be a guided tour of the gardens. Volunteers can contact Lori Johansen at Lori@cassavista.us

On April 28th the Palomar College and Arboretum is having a dedication of the Cactus and Succulent Garden that we donated to the College and Arboretum. This is the 50th anniversary of the garden; club members broke ground on the garden fifty years ago. This will also be potluck, so bring a special dish to share. There will be an auction of plants and landscape art, tours of the arboretum and succulent garden, plant sales. This will be a real fun event, make sure you are there.

The last item I want to inform you about are the changes for the brag table. Instead of two categories, there will be six. The new categories will be; succulent plants, cactus and plant of the month, each will be broken into novice and advanced. There will be a point system that is accrued through the year with first getting 6 points, second place receiving 4 points, third place getting 2 points and all other plants getting one point for participation. At the end of the year at the Christmas Party all participants will receive a gift plant with high points having first choice. There will be a plant for all participants donated by me. To enter plants you will fill out either a novice or advanced entry slip, name of plant, your name and check appropriate box, succulent, cactus or plant of the month. These will be collected after break. Winners and participants point totals will be posted in the newsletter each month.

Peter Walkowiak, President

Palomar Garden – at Palomar College Resuming Open Garden

Starting the 1st Saturday of February

Dick Henderson

Tours & Discussion only, not a work day

If members want to work in the Garden, “Authorization Papers” need to be filed with the College. Dick can make the paperwork available. There are a number of hoops to be negotiated: a tuberculin test and fingerprinting. Dick’s number is 760-480-4181.



HAPPY BIRTHDAY – FLORENCE ROBBINS!!!



The May 19th Plant Sale and Picnic will be at Alta Vista Gardens

1270 Vale Terrace Drive, Vista, CA 92084

<http://www.altavistagardens.org/>



Officers • Palomar Cactus & Succulent Society

Peter Walkowiak – President

Chris Barkley – Vice-President

Libbi Salvo – Secretary

Vicki Broughton – Treasurer

Ron Chisum – Program Chair

Dick Henderson – Board Member & Garden Chair

Bruce Barry – Board Member & Exchange Table

Don Nelson – Board Member

John Barkley – Board Member & Refreshments

Francis Granger – Board Member & Exchange Table

Stan Yalof – Board Member

Brita Miller – Librarian

Dennis Miller – Raffle & Plant Sales & Membership Co-Chair

Eleanore Hewitt – Newsletter & Membership Co-Chair



2012 MEETING SCHEDULE

25 February Joslyn Center

24 March Joslyn Center

28 April Palomar Garden

19 May Alta Vista Gardens, Vista

NOTE !!! 3rd Saturday !!

23 June Joslyn Center

28 July Joslyn Center

25 August to be determined

22 September Joslyn Center

27 October to be determined

17 November Joslyn Center

NOTE !!! 3rd Saturday !!

15 December Joslyn Center

NOTE !!! 3rd Saturday !!

Yes, the Club has had to raise the dues a little this year. I looked over the records, and it is the first time in nearly 6 years.

The fees for the hall have increased – only to be expected – and other expenses are climbing as well. In order to help with expenses, we have decided to institute a \$5 discount for members accepting an email-only copy of the “*Cactus Courier*.” Save a tree!

Palomar Cactus & Succulent Society

P.O. Box 840, Escondido, CA 92033

Membership Application

I/We wish to join/renew membership in the
Palomar Cactus & Succulent Society

\$25.00 Single Membership

\$30.00 Dual Membership (Same Address)

(1/2 price after June 30th)

There is a **\$5 discount** on the fees if you choose to receive your newsletter by email-only. Save money, leave a small carbon footprint, and reduce Eleanore's workload!

Please **print!** We have to be able to read it!

Email _____

Name _____ Phone _____

Address _____

City _____ State _____ Zip _____

Make checks payable to:

“Palomar Cactus & Succulent Society”

P.O. Box 840, Escondido, CA 92033



Farm Bureau News • February 2012

Mealybug Attacking Agaves and Succulents

By Lisa Leondis, Agricultural Commissioner



6,687: That's the number of farms located in San Diego County according to the most recently published National Census of Agriculture. That means there are at least that many sets of eyes looking out for new pests! Please keep us in mind when you are surveying your crops. Our agricultural scientists are here to see what new insect pests and diseases are lurking in the county – before they become a big problem.

We recently found a brand new mealybug infesting agaves and succulent plants in nurseries in San Diego County. The mealybug is known to belong to the genera *Paracoccus* and *Pseudococcus* (Homoptera: Pseudococcidae) but at this time, the species designation is unknown. The pest was given a “Q” rating by California Department of Food and Agriculture (CDFA) until the identification and risk assessment is completed. As a Q-rated pest, we will be treating it as a pest of economic importance and subject to eradication. While agave is thought to be the primary host, several other plants in the Asteraceae, Euphorbiaceae, Malvaceae (mallow plants), Solanaceae (Nightshade) and Sterculiaceae (Brachychitons) may also be vulnerable to this mealybug.

Description: The adults and immatures of this mealybug are pinkish purple with a gray hue, covered by a fine mealy wax, with short waxy filaments around the margins. Adults measure 2-3 mm and are more heavily covered with whitish wax than the immatures. Eggs are contained in 3-5 mm cottony masses attached to the leaves of the plant. The immature crawler is the dispersal stage for local movement between plants, such as in a nursery. The adult male is the only stage capable of flying. Therefore, the primary means of movement of the pest would be transport of infested nursery stock. The colonies of mealybugs are usually located around the main stem and whorl of the agave or succulent. Small infestations are difficult to detect and require inspection of the plant.

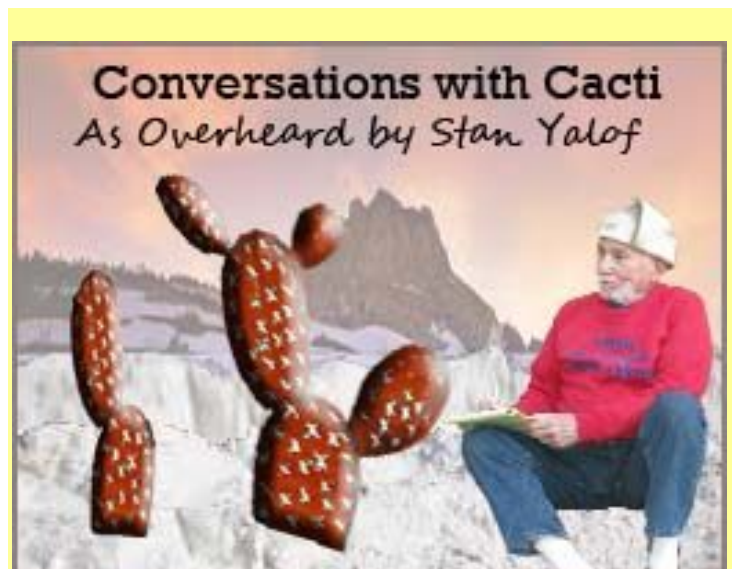
Distribution: The origin and range of the mealybug are unknown. Currently the mealybug has been found at several nurseries in San Diego and Riverside Counties. Populations of this mealybug may be intermixed with other mealybugs already known to be present here.

Damages: The mealybug attacks the leaves of agaves and succulents from the tips to the base of the plants. Heavy infestations, which may kill the plants, are easily recognized by the cottony masses covered by sooty mold. Severe infestations like these have been observed at nurseries in San Diego County.

Action Needed! As a Q-rated pest, even light infestation of agave mealybug found in a commercial nursery may result in the affected nursery stock being put on hold until the plants are free from all life stages of the mealybug. If you suspect that plants at your nursery may have this pest, please be proactive in dealing with it. If caught in the early stages, the amount of stock placed on hold would be

much smaller than if allowed to spread. You are encouraged to bring in a sample of the pest and the host plant to either the San Marcos (151 E. Carmel St, San Marcos, 92078) or the San Diego (9325 Hazard Way, San Diego, 92123) office of the Agricultural Commissioner to have the identification of the pest by our entomologist. The Entomology Lab can also be reached at 858-614-7738 or sdcawm@sdcounty.ca.gov. Your help is needed in collecting as much information about this pest. Working together we can keep invasive pests out of our local nurseries and the environment. Thank you for your help.

Sent in by Mike Regan



The old *Opuntia*'s clade looked over the snowdrift. Shivering below was a smaller plant. “Shivering cladodes, dad, being a cactus is hard.”

“Keep in mind, little one, that we cacti are the toughest of the tough. And it is just this stress that has pushed us to the apex and blessed us with around 180 genera and 2,000 species.”

“I could do with less stress and fewer cousins!”

“Be patient. Warmth is coming. I sense that the percent of daylight is growing. According to my Almanac I should begin budding a few days past the equinox. And that also goes for the other *Opuntias* hereabouts.”

“Couldn't we wait for the equinox further south?”

“You young ones need patience. Global warming is advancing in our direction at a quarter mile per year. Give it a hundred years and this place will be balmy.”

“A hundred years, the sun will fry and crack our cladodes.”

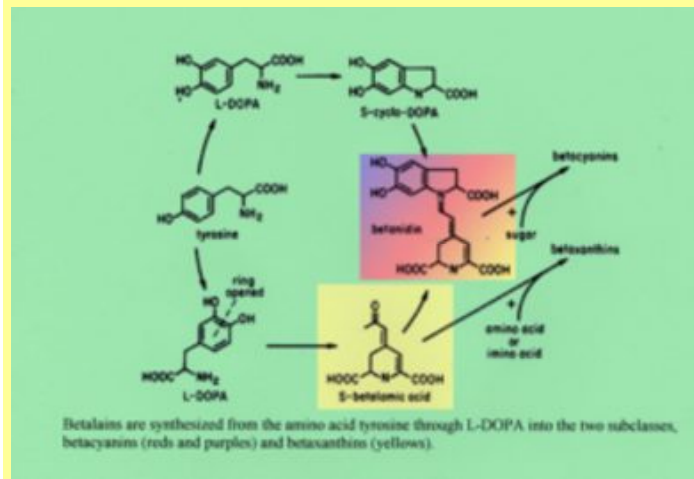
“Maybe other plants and animals, but not us. We are Caryophylles! Our Order and particularly we Cactaceae produce betalain.”

“And this stuff helps us?”

“Well I’m not a chemist, but could be...? On my cladode Wi-Fi I hear it’s being sold as an anti-oxidant. Besides coloring our flowers, it could collect in our apical meristem at our tips and allow us to withstand searing ultraviolet for hundreds of years without a crack on the noggin¹.”



Talinum Afarensis



The Production of betalain starting with amino acid tyrosine

“Brr, there must be nicer places down south.”

“Warmth, certainly. But this venue has certain charms.”

[Sarcastically] “I can’t wait to hear what they are!”

“Well we Cactaceae are tough. But all plants and animals live with stress. Indeed, without stress, why bother evolving? We have an edge with our ability to wait out drought. We can take hot sun. And we grow slow, patiently waiting out poor times, and surviving poor soils. Here the game tilts to us. As we travel north we move into richer glacial sediments. A small gain, but an advantage, and little competition!”

“So we’re being miserable, all for grit!”

“Don’t underestimate the power of sediments. They have a long, long, history. None of us would be here without them. A little history, young’un.”

“Five hundred million years ago the living world was microscopic. Large blocks of land had drifted together to form the super-continent of Panagaea. It included what were to

become the continents of today. A gigantic freeze had previously covered the land with glaciers, later called Snowball Earth. As they retreated, they released water and flushed nutrients across the land and into the sea. Some believe that this kick-started the rise of animals and we plants².”

“Sediments, huh. Well that was a long time ago.”

“Still true today. Life on Earth depends on them. Mountains and rivers and volcanoes feeding the Nile, Ganges, Brahmaputra, Mekong, Yangtze, Yellow River, Colorado, Mississippi, Rhone, Rhine, Rockies, Alps, Urals ...³”

“...and then we appeared?”

“Not yet. First simple plants like mosses came on land, then others, vasculars, like ferns, horsetails, cycads, conifers. The borders of Panagaea were lush, but the interior began to dry out.”

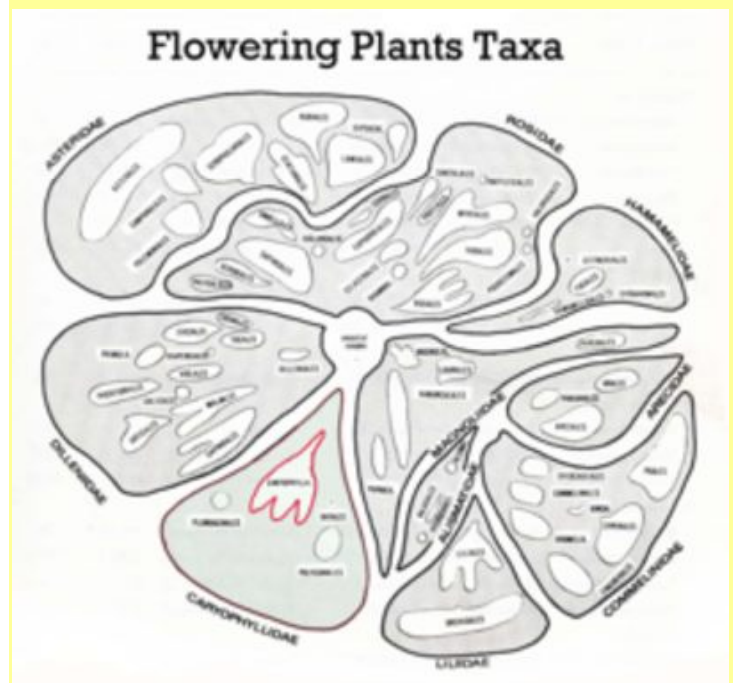
“...and then we appeared?”

“Not yet! A new kind of plant, scrappy and tough, appeared, about 140 MYA, in the Cretaceous period. Let’s call it Mama⁴. Right in the middle of dinosaur time. This was the beginning of us Angiosperms.”

Anticipating the next question from his youthful charge, the old Opuntia hastened to add, “That means enclosed seed, added protection, but more than that, a food supply was provided for the emerging seedling. First flowers weren’t much, but given time, wow!”

“...and then us?”

“Almost. Mama evolved into about 10 Sub-classes. We are within Sub-class Caryophyllidae, which includes our order Caryophyllales, proud carriers of betalain.”

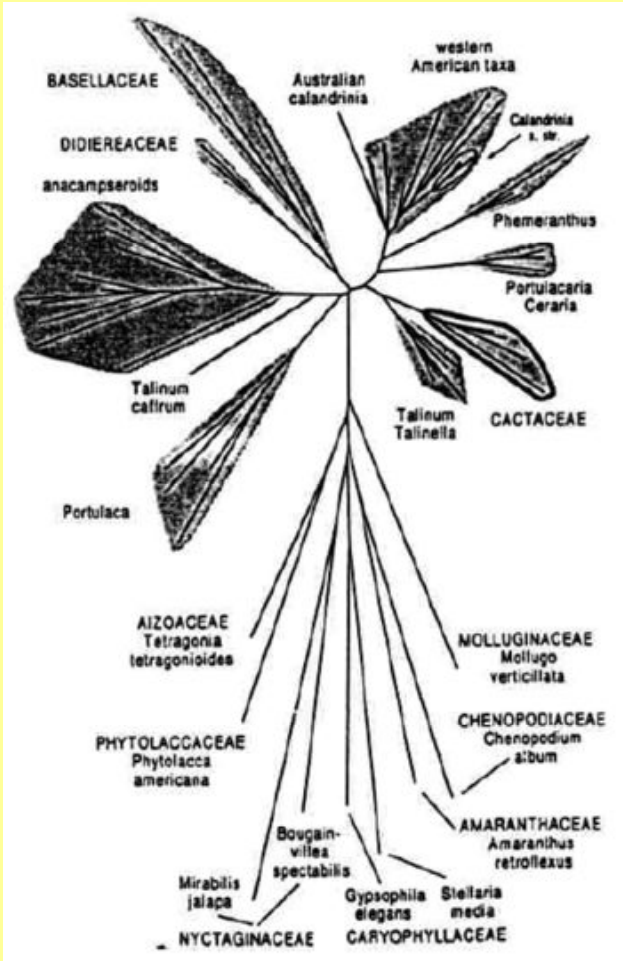


Angiosperm Taxa

“...and that’s us?”

“...and a lot of our cousins. There are about 10 families and 10,000 species in Caryophyllales, including *Aizoaceae* (ice

plants), *Portulacaceae* (purslane, portulaca), *Cactaceae*, etc. We cacti have about 200 genera, 2,000 species. How we are related to each other was a mystery. But now we have a pretty good idea. Some time back, plant taxonomers such as Arthur Cronquist played with the family tree. They weren't quite sure, but they suspected that cacti were related to African ice plants. Then with DNA analysis by Mark Hershkowitz of the Smithsonian, not only was the family relationship deciphered, but also the ancestor of cacti was identified.



Herskowitz Tree

“So which part of *Cactaceae* did we Opuntia come from?”

“That is a very good question!”



In Appreciation: Opuntia drawings are my modification of one by Ron Chisum. Our editors, Paul & Carol Maker do a fine job of assembling copy. Much thanks to Don Hunt for supporting these mini-talks.



¹ Betalain in the plant world is found only in Order Caryophyllales, which includes beets, Bougainvillea, ice plants, and Portulacaceae. It replaces anthocyanin as a pigment. As discussed in a previous talk on hallucinogens, betalain is a side product in the synthesis of mescaline from the amino acid tyrosine. It is the opinion of the author that this could be the critical sun-block for cacti scalps.

² Snowball Earth's effect on the rapid evolution of animal life due to glacial runoff is briefly treated in Scientific American, Feb. 2011, P 32, in the book Snowball Earth, and by articles in Nature and elsewhere. The 'snowball' glaciers occurred 635 to 750 MYA and studies have suggested that it once may have been possible to ski from pole to pole. Measurements revealed a large spike in phosphorous as the glaciers melted, causing downstream poisoning, and fish and wildlife extermination.

³ The effects of sediments depositing through river valleys are treated in a highly recommended book, Collapse, Jared Diamond, Penguin, 2005, P366, and elsewhere. Their beneficial effects on soil, grassland, wetland, fresh water, fish & mollusks, and navigation are discussed. The financial costs of fouling this ecology are much greater than the supposed economic needs of business.

⁴ AKA, the Ancestral Complex.



Eleanore ran into past member **Pete Gammarano** at the CSSA convention last year. It was lovely to see him again. He's up in the Washington state area, but has renewed his Palomar C&SS membership so he can keep up with us!

If you'd like to correspond with him, contact Eleanore for his email address.

Pete's still growing plants, and still fishing...



Mahi mahi (dorado) – caught off Baja



Aloe glauca – grown in Washington!

From CSSA website
<http://affiliates.cssainc.org/cssa-affiliate-events.html>

2012

February 11

San Diego Cactus & Succulent Society Show & Sale. Casa del Prado, Balboa Park, San Diego, CA from 9:00 til 4:00.
Info: www.sdcss.net

March 2, 3 & 4

Fresno Cactus & Succulent Society Show & Sale. Fresno Home & Garden Show, Greenhouse Building, Fresno County Fairgrounds, Fresno, CA. Info: www.fresnocss.org

March 23 & 24

Orange County Cactus & Succulent Society Show & Sale. Winter Show, First Anaheim Methodist Church, 1000 S State College Blvd., Anaheim, CA, 9:00 AM til 5:00 PM.
Info: www.occss.org

March 31 & April 1

Cactus & Succulent Society of San Jose, 43rd Annual Show & Sale. Marian A. Peterson Middle School, 1380 Rosalia Avenue, Sunnyvale, CA, For information call (408) 295-1634 or visit www.csssji.org

April 7 & 8

South Coast Cactus & Succulent Society Show & Sale. South Coast Botanic Gardens Info: www.southcoastcss.org

May 5-6

Sacramento Cactus and Succulent Society 52nd Annual Show and Sale. Sacramento Garden and Arts Center, 3330 McKinley Blvd., Sacramento, CA 95816. For information www.sacramentocss.org or call/email Marilyn Vilas at 530-753-7011 or nedmar@omsoft.com.

May 5-6

Sunset Cactus and Succulent Society Show and Sale. 13650 Mindinao Way, Marina del Rey, CA
www.sunsetsucculentsociety.org

May 6

South Bay Epiphyllum Society Show & Sale. 9:00 AM til 4:00 PM. At the South Coast Botanic Garden, 26300 Crenshaw Blvd, Palos Verdes Peninsula CA, 90275. Info call (310) 326-9212 <http://mattslandscape.com/sbes/>

May 6

Santa Barbara Cactus and Succulent Society Show and Sale. MacKenzie Park, Santa Barbara, CA, 10:00 til 3:00. Info: www.sbcactus.org

May 12 & 13

San Diego Epiphyllum Society Show and Sale. Casa del Prado, Balboa Park, San Diego, CA www.sandiegoepi.org

May 18 & 19

Gates Cactus and Succulent Society Show and Sale. Green Faire, Jurupa Mountains Discovery Center, 7621 Granite Hill Dr, Riverside, Ca 92509, Sale 9:00 til 4:30 Fri & Sat, Show 9:00 til 4:30 Saturday only. www.gatescss.org

May 26 & 27

Central Coast Cactus & Succulent Society Show & Sale. Ludwick Center, 864 Santa Rosa, San Luis Obispo, CA, Call 805-473-0788 <http://centralcoastcactus.org>

June 2 & 3

San Diego Cactus & Succulent Society Show & Sale. Casa del Prado, Balboa Park, San Diego, CA from 9:00 til 5:00 each day. www.sdcss.net

June 2 & 3

Fresno Cactus & Succulent Society Show & Sale. Sierra Vista Mall, Shaw and Clovis Avenues, Clovis, CA, Saturday 10:00 - 6:00, Sunday 11:00 - 4:00 Info: www.fresnocss.org

June 9 & 10

Los Angeles Cactus & Succulent Society; LACSS Drought Tolerant Plant Festival and Sale. Sepulveda Garden Center, 16633 Magnolia Blvd., Encino, CA, www.lacss.com

June 28 thru July 1

CSSA Annual Show & Sale
Huntington Library & Botanic Gardens, 1151 Oxford Road San Marino, CA. Sale Friday - Sunday. Show: Saturday & Sunday 9:00 til 5:00.

July 27 & 28

Orange County Cactus & Succulent Society Summer Show & Sale. First Anaheim Methodist Church, 1000 S State College Blvd., Anaheim, CA, 9:00 am til 5:00 pm. www.occss.org

August 11 & 12

Inter-City Show & Sale, Los Angeles County Arboretum, Arcadia, CA. 9:00 am til 4:30 pm. www.sgvcss.com

September ??

Succulent Symposium, Huntington Botanical Gardens, 1151 Oxford Rd, San Marino, CA www.huntington.org

Sept 23

Long Beach Cactus Club Annual Plant Auction, 18127 South Alameda St, Rancho Dominguez, CA www.lbcss.org