

ESPINAS Y FLORES



Program

Brian Kemble on Aloes

Combined Cactus & Succulent of the Month

Chris Miller Presents "What's Bugging Your Plants"

**The Newsletter of the San Diego Cactus & Succulent Society Inc.
Affiliated with the Cactus & Succulent Society of America**

Volume 39 Number 8

Saturday August 14th 1:00 PM

Room 101 Casa Del Prado, Balboa Park

Presidents Message

July 18, 2004

We had quite a crowd for the July meeting last weekend and it turned out to be a very interesting day. It was a good day to learn some history of the magnificent Succulent Garden along Park Blvd., as well as our Society. John Mellein and Lit Phan did a fine job of showing and telling us about the development of the gardens and it was wonderful to have Warren Buckner (Michael's dad) and long time member, there to fill us in on the pivotal roll that SDC&SS played in supplying plants and person power to make this garden a reality. I hope you all make time to visit this garden regularly and view it with a new "eye to history." Volunteers are always welcome to help out in this garden - if you are interested contact Jeff Harris for more information. Mr. Buckner also reminded us that it was Bob Taylor's 100th birthday. Bob is our oldest member and the last of our "Founding Fathers," we all wish you the very best Bob!

After the break, we were treated to a beautiful and educational presentation by Michael Buckner. Michael is a real artist when it comes to landscaping with succulents plants, so it was a pleasure to see some outstanding examples of his work. Thanks Michael for so many great landscaping ideas!

We have set up a YAHOO GROUP for SDC&SS. For those of you not familiar with these groups - it

is a great way to communicate and share information amongst all members who are online and wish to participate. We will be able to send out e-mail reminders of meeting and events as well assist in planning. Phil Bunch has agreed to set this up and has volunteered to explain how it works and how to get signed up. So be sure to be at the August meeting to get all the details!

LOTUSLAND.... For those of you who missed out on our fantastic trip to The Huntington on July 3rd, and are kicking yourself for not going along - be sure to sign up soon for our trip to Lotus Land. We will again be traveling on a comfortable Sundance coach to Santa Barbara and stopping along the beach for a picnic before our 1pm guided tour. The new Cactus Garden opened on June 6th and has had good reviews so don't miss this opportunity to be amongst the first to see it. Look for flyer in this issue and sign up TODAY.

REMEMBER: Your Board of Directors is responsible for the nuts and bolts running of this organization and meetings are open to any interested member. We meet the Thursday following the general meeting at the home of Tom and Laura Demeritt at 6pm. (call for directions.)

Pam Badger
pambadge@earthlink.net

Brag Table Winners for July 10, 2004
Judge: Michael Buckner

CACTUS:

- 1st - *Arrojadoa penicillata*
Joe Quijada
- 1st - *Lobivia longispina*
Mark Fryer



SUCCULENTS:

- 1st - Aloe X Fang x F2 x Midnight
Kelly Griffin
- 1st - *Cotyledon cacalioides*
Andrew Wilson
- 2nd - *Rauhia peruviana*
Joe Quijada
- 2nd - Aloe X SeanRed F2 x (Sugar)
Kelly Griffin
- 3rd - *Tillandsia(s) diaguitensis & xiphioides*
Kay Quijada
- 3rd - *Dyckia rariflora*
Joe Quijada



LOTUSLAND....



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WHAT'S BUGGING YOUR PLANTS

By Chris Miller

As in other things in life, the best defense is a good offense. So when it comes to protecting your plants you need a plan, a system to work to. So this is the start of your plan.

Step 1

Quarantine. It is always a good idea to keep new plants separate from the rest of your collection for a few weeks. This allows the eggs to hatch and the pests to be spotted. Another option is to treat the new plants with a systemic. Always inspect plants that are being transplanted for root mealy and treat if infestation exists.

Step 2

Regular Inspection. Checking your plants should be at least a weekly event. Be sure to check plants in the back of the shelf or those tucked in corners with less airflow and direct water. That tends to be gathering spots for pests. Any plants with signs of infestation should be removed and treated as appropriate. The rest of the plants should be treated as a precaution.

Step 3

Keep Plants Clean. When you perform your regular inspection remove dead blooms and seedpods (if loose). Also remove any leaves or dried flower stalks. Mealy bugs especially like to hide in the dead leaves in plants like Echeverias. Snails and slugs are prone to hide in dead leaves around the base of Aloes in damp environments. Ants also collect this material and you don't want to invite them

Step 4

Regular Applications. In spring, after plants have started growing and again in late summer use a systemic (a different pesticide each time). This concept usually covers both summer and winter growers at the turn of their seasons.

Step 5

Clean Environment: Keep potting benches clean. Don't reuse pots without cleaning first. Greenhouses, shelves and patio surfaces should be cleaned out and scrubbed, spring and fall, to keep bugs from hiding in corners.

The use of chemicals is met with mixed reactions. The label should always be read and appropriate protective things like rubber gloves, masks, safety glasses, and long sleeves should be used. If your infestation is light, then you have a couple options.

Use alcohol or mineral oil and a Q-tip or spray and wipe the bugs off your plants. Plan to spend a lot of time with the plant. It may take weeks of repeated attention to get all the little buggers. Throw the plant away if you have more than one and it isn't real valuable

Use good insects that will eat the bad ones. (It is difficult to keep the balance of insects.)

If you have a heavy infestation you need to throw the plant away, treat with Neem Oil or treat it chemically. When I use a pesticide I prefer a systemic, because I have a better chance of getting all the bad guys. If you are concerned with poisoning the hummingbirds, bees, etc, remove the flowers before the blooms open. Once the plant is cleaned up, it is easier to keep it that way with natural remedies.

Neem oil is organic, it doesn't kill the pests, but instead, alters their behavior and physiology. When ingested, this substance inhibits growth by interfering with hormones that are vital to molting. Larvae are prevented from completing the molting process and most die.

If you are going to use beneficial insects to control your pests here are some guidelines from Barbara Pleasant's Bug Book:



Mealy Bug Infestation

1. Plan your releases when the friendly bugs are likely to find plenty of pests in the immediate vicinity. Late spring to early summer is usually the best time.

2. Keep purchased bugs or eggs at room temperature until you release them, but avoid holding them for more than a few days.

3. Release the insects or spread the eggs in the morning or evening, not in the middle of a hot day. Wet down the garden thoroughly first in case the new bugs are thirsty.

4. When distributing lacewing or other insect eggs, place them on plants that may harbor their preferred foods, such as aphids or mealy bugs.

5. If flowers are not yet in bloom and nectar is in short supply, provide supplemental food. (She recommends a mix of ½ cup brewer's yeast, ½ cup of sugar and 5 cups of water to make a batch of bug food. Dribble this mixture on a few plants

GENERAL INFORMATION ABOUT COMMON PESTS IN OUR AREA

Aug-04

PEST	DESCRIPTION	REPRODUCTION CYCLE	INDICATORS	HABITS	SYNTHETIC CONTROL	NATURAL CONTROL
MEALY BUGS	Soft-bodied insects that have piecing-sucking mouthparts. They possess a covering of flocculent, white waxy threads. Developmental stages are egg, nymph and adult.	Egg to adult can take about 60 days, developmental time is increased by higher temperatures. Some species can reproduce without fertilization. Two to three generations a season, winter over as eggs	Ants overly interested, white fluffy stuff between leaves or in creases of plant.	Produce honeydew which can lead to black sooty mold fungi. Not to mention that ants eat the honeydew. Nest deep in crotches of a plant	Routine applications of approved chemicals.	Predator Cryptoleaemus montrouzeri, which requires temps of at least 70 degrees F
ROOT MEALY	Cotton like masses which contain both females and eggs. Adults are 1/2 the size of regular mealy bugs	Infestations are slow to develop with 3-6 months before they are detected	Visible when repotting, plant shows no sign of growth	Nymphs can crawl pot to pot through the drain holes	Routine applications of approved chemicals.	
APHIDS	1/5th of an inch long, yellow or black in this area	Most are female and reproduce rapidly. In autumn males appear to fertilize the females so the eggs can survive the winter	Ants overly interested, black or yellow bugs on flower stems and flowers	Over winter in egg state. Also excrete honeydew.	Systemic pesticide, quick local application of rose systemic spray	Spray with soapy water then rinse, ladybugs
SCALE	Circular in shape, sticky to touch and range in color from white to brown to black. Protective cap forms over their bodies	Multiple generations a year, winter is passed in all forms, born live, nymphs move around for several hours before beginning to feed	Yellowing of leaves or plant, white or brown spots	Also excrete honeydew.	Systemic and repeat as recommended on label	Mineral oil (except egg stage) so repeat
SPIDER MITE	1/150 to 1/50 inch long. Use a magnifying glass to find them	Female can lay up to 120 eggs over a period of 3 weeks, which hatch and mature within just 14 days. Eggs are laid at the base of plant or under leaves and on buds. Heat also has an impact on speed of development	Usually yellowing or browning of the infected plant body or leaf surface.	Congregate in colonies, where they may form fine webs upon which they are more visible	Spray thoroughly every 7 days until all generations have been eradicated with a miticide.	Lacewings, Lady Bugs
SNAILS & SLUGS	Adults are gray to black or brown soft bodied and have eyes at the tips of small tentacles. Two other tentacles are used for smelling. They can grow up to 3 inches long. Snails have shells.	Several years are required to complete life cycle	Slime trails, scraped holes in plant skin or leaves	Most feed at night and hide during the day	Bait pellets, Dust with diatomaceous earth for more serious infestations	when they come out at night. Place saucers of stale beer in the garden to drown them. There are snail eating snails available

around the garden)

If you are going to use beneficial insects then you cannot use the chemical pesticides, because they will get the good guys along with the bad.

Some advice from club members I interviewed over the last few months on dealing with pests:

Mark Fryer: He says the first measure to prevent problems is to treat your plant area for ants monthly. He uses Diazanon granules. He also stated that proper watering techniques help combat infestations

Mealy bugs: he uses Malthyon, however after 3 generations they become resistant to it, so changing the chemicals help combat their resistance buildup. He also noted that there are over 600 varieties of mealy bugs

Scale: Malthyon and then blast the dead ones off with water

Root mealy: Cygon

Aphids: soapy water

Aloe mites: Azatrol or other systemic

Juergen Menzel: Says to use chemicals as rarely as possible and change the chemical to prevent immunity

Mealy bugs & Aphids: use a systemic insecticide

Aloe Mites: remove infected areas
Ants: spray anticide

Spider mites: (Which love Adeniums) spray with Kelthane

Herb Stern: Uses alcohol in a small sprayer to treat mealy bugs in the greenhouse. Outside he sprays them off with water.



Mealy on Ferocactus Spine

Joe Quijada: Uses a product called Sun Spray - Ultra fine. It is a light oil that he gets from Walter Anderson Nursery. He uses it on cactus and orchids to treat scale. The bi-product of using it is that it makes the plants look better. Spray in the evening so that you don't burn the plants. He uses alcohol on mealy bugs.

I treat twice a year with a systemic. At first I was using Cygon, but it is no longer available. Currently I am using Orothenex, which is a systemic, on the greenhouse plants. I have tried it so far on cactus for mealy, scale and spider mites, with good results. Last

fall the systemic I used was Bayer's Tree & Scrub.

control Article, August 1991

Between those two events I treat on an individual basis as need arises. For aphids I tend to treat immediately with Ortho Rose Spray, which has a systemic in it, then use Bayer 2-in-1 Rose & Flower Care for Hoyas, Kalanchoe, Empyphyllums, Fouquieria and anything else that likes stronger nutrients. I also use alcohol and a Q-tip to clean up plants. I try not to leave dead bugs hanging around.

Aloe mite I treat with whatever systemic I am currently using. I try to cut out the infestation and have been known to throw Aloe away if they were not near and dear. Because we cannot use insecticides at the Old World Succulent Garden we have a pretty significant crop of aloe mite in our Aloes. We cut it out as best we can, but it is an on going battle.

How you execute your plan will depend on your desire to go with or stay away from chemicals. Getting to a point where discovering a bug is out of the ordinary is a nice place to be, but you have to work your plan.

References:

The Gardener's Bug Book, Barbara Pleasant, 1974
Rondale's Garden insect, Disease & Weed Identification Guide, Miranda Smith and Anna Carr 1988
Cactus File, Red Spider Mite Article, November 1994
Hobby Greenhouse, Neem Oil and Pest Management Article
The Cactus File, Pests, and their



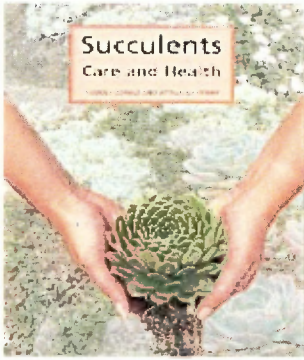
Ants & Scale on Yucca Leaf



Damage from Spider Mites

Some Websites for more information:

<http://www.succulent-plant.com/pests>
<http://www.ipm.ucdavis.edu>
<http://anrcatalog.ucdavis.edu>



Book Review

Succulents – Care and Health

By Rudolf Schulz and Attila Kapitany

2003, 104 pages, 7-1/4" x 10", softbound

This is a great book for people new to growing succulents and for those of us who still don't have everything figured out. It is made up of easy to read sections on how to grow and care for your succulent plants.

Topics include:

- Living conditions in cultivation, types of pots and soil mixes
- Repotting
- Pests and disease (shows natural and chemical treatment)
- Lighting, watering, fertilizing
- Pruning and cleanups

There is a great section on how to revitalize an old shrubby *Crassula ovata*, which caused me to go out and hack on several of mine. The reward is a fatter trunk and a tighter growing plant, just like the book said!

There is a discussion of good plants vs bad plant, which compares plants grown well, and plants with challenges. A good number of the books 225 color pictures are comparison pictures. I did go out and discover some plants that were quite dead and I just thought they were resting (plants don't float so sometimes it is hard to tell they are dead). So there was room on the shelves for a few new plants.

It also has a section on how to revitalize bargain plants. It gives tips on how to bring plants back to healthy state. It is still hard for me to throw away a plant with a hint of life left.

I highly recommend the book, it has some great answers to lots of the questions I have had over the years about my plants.

The book is available from Rainbow Gardens for \$15.95.

Upcoming Events

2004

July 1 - 3 : CSSA Show and Sale at HBG Plant Sales are July 1, 2 and 3. Plant Show is July 2 and 3 only. Hours for both events are 10:30a.m. - 5:00p.m. Parking & Admission to Plant Sale and Show are free. (Special note: admission to Huntington Bot. Gdns is free on July 1). For more info. contact: Jim Hanna at: aloecats1@aol.com.

July 17 - 25 Henry Shaw Cactus Society will hold its Annual Show and Sale at the Missouri Botanical Garden. Opening at noon on Saturday July 17 it will be open daily until Sunday July 25 during the hours from 9am until 5pm. Both show and sale will be in the Orthwein Floral Display Hall at the MBG. Details from Bob Harris at bobharris@accessus.net or Pat Thomann at prt@charter.net

August 14-15 Houston C&SS Annual Show and Sale. Free Admission to (judged) show of cacti and succulents. Rare and unusual plants for sale. Children's drawing contest (prizes!). Houston Arboretum and Nature Center, 4501 Woodway Dr, Houston, Texas. Hours 10am-5pm each day. Contact Hank Andresen for more details. Tel: 713-436-1734 or e-mail him at hand1609@hotmail.com

August 20 - 22 14th Eastern C&S Conference at the DoubleTree Guest Suites in Plymouth Meeting PA. Hosted by the Philadelphia C&SS. While you're there, enjoy Longwood Gardens and Morris Arboretum, world-class museums and a brand new baseball stadium. For more info contact Co-chairpersons, Rita Hojnowski 856-227-0599 ritabhoj@comcast.net or Elayne Toizer e-mail: atoizer@aol.com or tel: 215-233-2965 Succulent Lovers, Unite!!!

August 21 : British C&SS National Show, Spalding Exhibition Centre, Springfield, Spalding, Lincs, England.

September 4 : 21st Huntington Symposium at Huntington Botanical Gardens.

September 5 : CSSA Board Meeting, Huntington Botanical Gardens. (Ahmanson Classroom).

Mid-October : CSSA Tour to Chile, home to Copiapoa, Eriosyce, Eulychnia and others. See itinerary in last issue of To The Point.

2005

January 15 : CSSA Board Meeting at Huntington Botanical Gardens

April 16 : CSSA Board Meeting at Huntington Botanical Gardens

July 1 - 3 : CSSA Annual Show and Sale at Huntington Botanical Gardens

August 5 - 11 : CSSA 31st Biennial Convention, Scottsdale Plaza Resort, Phoenix, Arizona Host Club: The Central Arizona Cactus & Succulent Society Special Rate for Rooms \$89 per night (Normally \$300)

Convention Chairman, Duke Benadom Program Chairman, Leo Martin e-mail: leo1010@attglobal.net Confirmed speakers already include Sheila Collenette, Chuck Hanson, John Lavranos, Mark Muradian, Gard Roper, Guy Wrinkle.

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Brag Table: Shirley Berry & Kay Quijada
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Winter Show: Ed DeLollis
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