

COMMUNIQUE

SAN GABRIEL VALLEY CACTUS & SUCCULENT SOCIETY

An Affiliate of the Cactus & Succulent Society of America, Inc.
Meetings are held at **7:30 PM** on the 2nd Thursday of the month
in the Lecture Hall, Los Angeles County Arboretum, Arcadia
February 2008 Volume 41 Number 2

Monthly Meeting: Join us **Thursday, February 14th** at 7:30 pm. Buck and Yvonne Hemenway will make a presentation entitled "South African Succulent Discovery, Our Favorite Places".

Plants of the Month: (see attached write ups)

CACTI – Copiapoa

SUCCULENT – Sansevieria

Bring your specimens in for our monthly mini-show. It will help you prepare for the real shows and give you an additional opportunity to show others your pride and joy. If you don't have any of this type of plant you can learn about them at the meeting

Study Group: Wednesday, February 20th; Topic – Aloes

Meetings are held the 3rd Wednesday of the month at 7:30 pm in the Lecture Hall at the LA County Arboretum, 301 N Baldwin Avenue, Arcadia.. These exciting events feature expert group leaders and mentors, free give-a-ways (some of the best plants you'll ever get!), and lively discussion. Everybody learns something!

Refreshments: The following club members have signed up to bring refreshments for the February meeting: **Rene Hernandez, Cindy Arakaki and William Molina.** Remember the first three people to sign up and bring refreshments will receive a plant.

New Members: SGVCSS wishes to extend a warm welcome to its newest members: **Martha Rund, Hannah Nguyen, Eve Lyman, Betty Parnell and Irma Juarez.** Be sure to take a look at the Club's website <http://www.sgvcss.com>. If you wish to receive your COMMUNIQUE on-line please notify the editor at sgv_css@prodigy.net.

Membership Renewal and Roster Deadline: February 15th is the deadline for inclusion in the 2008 Roster. The February Communique is the last one you will receive unless you renew your membership. Check the date on your mailing label to verify your membership expiration date. If it does **not** say 2008 you have not renewed. Dues are \$12 for a single membership, \$15 for two people at the same address. Send checks to Bill Gerlach at 719 S Albertson, Covina, CA 91723, or pay him at the February meeting. If the treasurer does not have your membership money by February 15th, your name(s) will be **removed** from the membership list

January-08 Plant-of-the-Month Mini Show Results

Cacti -	Hooked Spined Mammillaria		Succulent-	Bulbs	
Beginner					
1st	Susan & Walter Weststeyn	M. bombycina	1st	Stefan Szalkowski	Albuca spiralis
2nd	Pat Swain	M. microcarpa	2nd	Lorraine Lutz	Bowiea volubilis
3rd	Pat Swain	M. duwei	3rd	Calvin Arakaki	Bowiea volubilis
Intermediate					
1st	T. Dodson - H. Birgh	M. mazatlanensis	1st	John Matthews	Massonia depressa
2nd			2nd	T. Dodson-H. Birgh	Hippeastrum hybrid
3rd			3rd	John Matthews	Massonia pustulata
Advanced					
1st	Frank Nudge	M. blossfeldiana	1st	Alan Hooker	Bowiea volubilis
2nd	Frank Nudge	M. tetrancistra	2nd	Barbara Nolan	Sinningia sp.
3rd	Rita Gerlach	M. guelzowiana	3rd	Manny Rivera	Massonia depressa
Master					
1st	Tom Glavich	M. magnifica	1st	Tom Glavich	Cyrtanthus obliquus
2nd			2nd	Tom Glavich	Nerine flexuosa
3rd			3rd		

A MANUAL of CALIFORNIA VEGETATION



John O. Sawyer and Todd Keeler-Wolf

Our Chapter comprises a number of very talented individuals: lay botanists, researchers, growers and photographers. Among this last group is **Tommy Dodson**, a SGVCCS member since 2003. What began as merely a hobby, with a point-and-shoot camera, soon blossomed into part-time professional photography. While an active member of the California Native Plant Society, Tommy gave slide-show talks for various chapters, and provided his photographs for inclusion in newsletters, etc. From among many photo submissions to the CNPS Publications Committee for their groundbreaking revision of California floristic zones entitled “A Manual Of California Vegetation,” by John O. Sawyer and Todd Keeler-Wolf, Tommy’s breath-taking photo of montane scrub and aspen forests along Rock Creek in the Inyo National Forest was chosen to grace the cover of this authoritative manual of native plant communities.

San Gabriel Valley Cactus and Succulent Society

Cactus of the Month February 2008 – *Copiapoa*

Copiapoa is a unique genus of spectacular plants from the North Coast of Chile. The genus has no close relatives, and is confined to a region of ecological change that is becoming steadily drier for the past several hundred years. The Southern limit of *Copiapoa* is where reliable winter rains can be found. The Northern limit is the tropical region of reliable summer rains. *Copiapoa* live along the coast and through the river valleys cut through the coastal mountains. Some species live completely on dense fogs that appear regularly for months at a time. The hills and valleys of Northern Chile are still not well explored from a botanical point of view, with new species still being described and additional species to be found in the future.

In the past, there were more species than there are now, with some going extinct due to steadily decreasing rainfall.



Copiapoa hypogaea

Given these extreme conditions, one would expect the cultivation of these plants in Southern California, with our frequent winter rains, fogs, and “June gloom” to be quite a challenge. Fortunately, this is not so, and *Copiapoa* are relatively easy to grow. They respond happily to the same potting mix,

watering, and fertilization as most cacti, growing many times faster than they would in habitat. Some species can even be grown in the open ground in the San Gabriel Valley, as long as the soil is well drained. They do tend to be slower growers than many.

Copiapoa are easily propagated from cuttings or division of clumps. Seed is available from the CSSA seed bank, and most cactus seed houses, and germinates quickly in the spring. They should be started in a moist potting soil, and moved to drier media after germination. They do very well in a mineral potting mix with almost no organic matter.

Copiapoa were first collected in the 1840s, and described as *Echinocactus*, then the home of anything more or less globular. The genus *Copiapoa* was named by Britton and Rose in 1922 in their great work **The Cactaceae**. The name derives from Chilean province of Copiapo, home of many of the species.

All of the *Copiapoa* are worth growing. This is a genus unparalleled in excellent species.

Classic Copiapoa

Copiapoa cinerea In habitat this species is an ash-gray with black spines. They grow to 4 or 5 inches in diameter, and cluster. In cultivation, the body tends to stay greenish, but it remains a classic plant.

Copiapoa humilis is a widespread species, with many named varieties. It is one of the smaller species, easy to grow, and very common. All of the varieties are equally easy and differ from the type (first to be found) of the species by variation in spination. *Copiapoa humilis* v *humilis* is dark green

with black spines; *v. longispina* is a lighter, green with white spines; *v. tenuissima* has woolly areoles; *v. tocopillana* is densely spined. All of these are worth collecting. The larger of the two heads shown in the adjacent picture is less than an inch across.



Copiapoa humilis v. tenuissima

Copiapoa hypogaea is a dwarf species, clustering in habitat and cultivation. It is variable, and several named varieties exist, all worth growing. ***C. hypogaea v. laui*** is the smallest of the *Copiapoa*, growing to only $\frac{3}{4}$ of an inch across. ***C. hypogaea v. montana*** has very woolly areoles, particularly when grown in cultivation.

Copiapoa krainziana properly known as ***Copiapoa cinerea v. krainziana*** is one of the most popular species. Easy to grow, with long white spines, and a woolly crown, it is really the most extreme of a very variable population.



Copiapoa caldeana

Copiapoa calderana from central Chile, is easily grown from seed. Although globular at first, after a few years it becomes a well spined cylinder. The specimen shown above should start developing a grey wool crown. This species has a large tap root, and needs a bigger pot than might be expected for optimum growth.

Copiapoa solaris comes from the northern part of the range. It is a fairly large plant in habitat, forming clusters up to six feet cross and three feet high. It is one of the most photogenic of the entire genus, particularly in habitat.

References:

Britton and Rose, **The Cactaceae**

Charles, G. **Copiapoa**

Innes, C. and Glass, C., **Cacti**

Tom Glavich January 2008

San Gabriel Valley Cactus and Succulent Society

Succulent of the Month - February 2008 *Sansevieria*

The world is divided into two types of people, those who like *Sansevieria* and those who don't. An alternative is that there are two types of people, those that think all *Sansevieria* look alike, and those that think only most of them look alike.

Fortunately several members of the San Gabriel Valley Society are *Sansevieria* lovers, and know that there is a wealth of form, color and texture available in this genus of succulent plants.



Sansevieria 'Lillian True' turning false

There are about 60 species of *Sansevieria*, but since many of the species are variable and have widespread habitats, there are more names than this. There are also dozens of cultivars, particularly of variegated *Sansevieria*. They are currently in the *Dracenaceae* family, but have moved through the 'dumping ground' families. In older references, they will be found in the *Lilaceae*, *Aloinaceae*, *Agavaceae*, and other families.

Most *Sansevieria* are native to Africa, although some come from India, Asia and the South Sea Islands.

They are among the easiest of all succulent plants to grow, requiring only a pot or a spot in the ground. They are tolerant of incredible neglect and abuse, but most grow rapidly and well if watered and fertilized regularly. They do well in Southern California outdoors or in, and suffer damage only if they are cold and wet for extended periods. They are free from most pests, suffering only rarely from scale. They are prone to fungal rusts, particularly in damp weather. The only cure for rust is to cut off the infected leaves, sterilizing the cutting tool after each cut (an alcohol wipe will do) and then spray the entire plant with a fungicide such as Funginex. Prevention is much easier. Bright light, and moving air prevents most rusts.

Sansevieria propagation is remarkably easy. Cut a piece off, let it dry for a few days, and stick it in some potting soil. They propagate readily from leaves (tips are best), rhizomes, roots, etc. They can also be propagated from seeds. In Southern California *Sansevieria* flower frequently, particularly when grown outdoors. The flowers are extremely fragrant, and can perfume an entire house. Each rosette only blooms once, so after flowering, the new rosettes should be kept, while the old ones are discarded. They are usually self fertile, and produce orange berries, each containing a single seed.

Variegation is very common in cultivated *Sansevieria*, and variegated plants form the majority of some collections. For a few species, variegated forms are much more common than normal forms. Variegation is

produced apparently at random. A variegated pup will appear on an otherwise normal plant. The variegation can be preserved by removing the pup and a portion of the rhizome, and growing it on. If this is not done, the variegated pup, being weaker than the rest of the plant will not reproduce. Variegated plants are slower growers than normal plants, and are much more sensitive to cold and wet conditions. They need protection, particularly in the winter. They are also sensitive to standing water in their crowns, quickly rotting if water is allowed to remain.

Variegated plants are likely to produce pups with new variegated patterns. These can be removed and grown as a new cultivar. This is the source of many of the cultivars we now know. Even more likely are reversions, as seen above. The normal growth must be removed, or the variegation will not reproduce.

Selected Species

Sansevieria aubrytiana is a beautiful thick leaved species, now sometimes included in *Sansevieria kirkii*. From Malawi, Tanzania and Zanzibar.

Sansevieria bacularis grows with thin stems up to four feet long, but only half an inch in diameter.

Sansevieria kirkii a thin leaved, rapidly growing species has leaves that turn copper colored in bright light. Several cultivars are known.



***Sansevieria patens* entered in the 2001 Winter Show by Karen Ostler**

Sansevieria parva, is not particularly good looking, but it is a rapid offsetter, and frequent bloomer with extremely fragrant blooms.

Sansevieria patens, with an unknown, but probably Kenyan origin, is shown above. This is one of the most architectural of all of species.

Sansevieria pinguicula, also from Kenya makes small hard rosettes supported on stilt like roots, and offsets by aerial branches. It is very slow. A plant of any size at all does well in all shows. The one shown above is a fine example.

T. Glavich
January 2008

**CACTUS AND SUCCULENT
CALENDAR OF UP COMING EVENTS FOR 2008**

- FEB. 9th SAN DIEGO WINTER SHOW AND SALE 9AM to 4PM
RM. 101 CASA DEL PRADO, BALBOA PARK, SAN DIEGO
- APR. 12th - 13th SOUTH COAST CACTUS & SUCCULENT SOCIETY SHOW & SALE AT SO. COAST
BOTANICAL GARDENS 26300 CRENSHAW BL., PALOS VERDES, CA # 310-832-2262
- APR 19th - 20th GREEN SCENE PLANT SALE—AT THE FULLERTON ARBORETUM
1900 ASSOCIATED ROAD, FULLERTON, CA 92831
- APR. 27th SOUTH BAY EPIPHYLLIUM SOCIETY SHOW AND SALE
SOUTH COAST BONTANICAL GARDENS INFO. CALL-310-833-6823
- MAY 3rd - 4th SUNSET CACTUS AND SUCCULENT SOCIETY SHOW AND SALE
VETERANS MEMORIAL CENTER, GARDEN ROOM
4117 OVERLAND AVE. CULVER CITY, CA. INFO. #310-822-1783
- MAY 18th HUNTINGTON PLANT SALE 10 TO 5 HUNTINGTON BOTANICAL
GARDEN 1151 OXFORD ROAD, SAN MARINO, CA 626-405-2160
- MAY 18th EPIPHYLLIUM SOCIETY SHOW AND SALE
LOS ANGELES COUNTY ARBORETUM, ARCADIA, CA 310-670-8148
- JUNE 7th - 8th SAN DIEGO CACTUS AND SUCCULENT SOCIETY –SHOW AND SALE
BALBOA PARK, ROOM 101, SAN DIEGO, CA. INFO.--#619-477-4779
- JUNE 14th GATES CACTUS AND SUCCULENT SOCIETY 29th SHOW AND SALE----SAT. 9 TO 4
JURUPA MOUNTAINS CULTURAL CENTER, 7621 GRANITE HILL DRIVE, GLEN AVON, CA
INFO. 909-360-8802
- JUNE 14th - 15th LOS ANGELES CACTUS AND SUCCULENT SOCIETY SHOW AND SALE
SEPULVEDA GARDEN CENTER, 16633 MAGNOLIA BL., ENCINO, CA.
SHOW INFORMATION-CALL 818-363-3432
-

Chinese Garden Set to Open at the Huntington

Liu Fang Yuan Opens to the Public Saturday, Feb. 23
Some 10 years in the making, The Huntington's Garden of Flowing Fragrance, or Liu Fang Yuan, makes its highly anticipated public debut on Feb. 23. Members and Fellows can avoid opening-day crowds by attending one of several invitation-only previews between Feb 17 - 22, and be among the first to experience this breathtaking new landscape.



Mites, They *kill* Aloes, don't they?

By Michael J. Green

Well, at least one does, sort of. The dreaded Aloe mite, aka Aloe gall mite, Aloe wart mite and Aloe cancer mite, doesn't exactly "kill" the Aloe, but it does destroy the aesthetics. The technical name is either *Aceria aloinis* or *Eriophyes aloinis*, two names for the same villain. In addition to aloes, *Eriophyes aloinis* is reported to infest *Haworthia* species. Googling each name will return different sets of information. About 45,000 species of mites have been described, but this amounts to only about 5% of the number of species estimated to be alive today.

Mites have successfully colonized nearly every known marine, terrestrial, and fresh water habitat including polar and alpine extremes, tropical lowlands and desert barrens, surface and mineral soils to depths of 10 meters, cold and thermal surface springs and subterranean waters with temperatures as high as 50C, all types of streams, ponds and lakes, and sea waters of continental shelves, deep sea trenches to depths of 5000 meters AND some Aloes. They're everywhere. Mammals, including us, and birds, are hosts to innumerable species of parasitic mites (e.g. scabies and mange mites), as are many reptiles and some amphibians. Many mites have complex symbiotic relationships with the larger organisms on which they live. Some, like our "Aloe mite", are more parasitic. Mites found on agricultural crops are major economic pests (e.g. spider mites) or useful bio-control agents (e.g. phytoseiid mites) of those pests.

There are three major groups of mites that attack cacti and succulent ornamental plants. These are the spider mites, the false spider or flat mites, and the gall or eriophyid mites. Aloe mites are classified as eriophyid mites. Species specific information is difficult to find; thus much of the information presented is derived from eriophyid mites in general. The eriophyids are a group of plant-feeding mites that inject a plant growth regulator similar to the weed-killer 2,4-D (2,4-Dichlorophenoxyacetic Acid) into the plant cells as they feed. This induces formation of a gall, which surrounds the mite as it feeds. Eggs are laid within the gall; nymphs mature within the gall and the emerging adults infest new foliage. Galls themselves are abnormal plant growths.

Since they are mostly host specific, eriophyids can be identified by the plant and damage seen. Various other organisms such as insects, nematodes, fungi, bacteria, and viruses can also cause galls, though not necessarily on aloes. After the induced change has altered the behavior of the affected cell or cells, the mite does not have to remain on the site (i.e. in the gall) to insure continuation of gall growth. Stems, leaves and flowers may be affected. These tiny mites typically over winter on their host plant. They begin feeding and initiate gall formation in spring as the leaf or flower buds open. Eriophyid mites usually do not cause serious "injury". Large populations can be tolerated by plants, but the damage may / will be unsightly. The damage to the aloe plant is irreversible. There is an *Aloe bainesii* compact form at the JMCC that has its galls cut out almost annually and the Aloe still looks healthy.

Since eriophyids are among the smallest of mites (less than 1/100 of an inch in length), field identification of species on the basis of their morphology usually is difficult or impossible. Eriophyid mites are more closely related to spiders and ticks than to insects. Unlike spider mites, which have 8 legs (as do spiders), and insects, which have 6 legs, eriophyids have only four legs. They are located near the head so that the elongate posterior portion of the body must be dragged along the plant surface. They are long, ringed (annulate), and worm-like. Eriophyids are also the only important mite transmitters of plant viruses.

They are poor crawlers, but their small size facilitates travel between hosts by wind, water, insects, birds, and people. Eriophyid mites reproduce rapidly. Fertilization occurs when females come in contact with sperm sacs left on the host by males. Females can lay as many as 80 eggs in one month under favorable conditions. The majority of eriophyid mite species go through four stages of development - the egg, two nymphal instars and the adult. The length of life cycle is variable depending on the species, but it is usually approximately seven days to reach adulthood. Adults live for about one month, and there are as many as six to eight generations per year where seasons are long.

It is fairly easy to control (but not destroy) eriophyid mites. Infected areas can be cut out to eliminate adult mites and remove unattractive tissues. Burn, or (plastic) bag and dispose, of infested plant tissues in the trash. Removing and destroying galls is often necessary to stop the spread of mites on the current host plant and neighboring plants. Exposed mites are easily controlled, but most pesticides do not kill the mites living within galls.

Heavy infestations can be “controlled” with insecticides. Spraying, or root drenching plants, will not get rid of the galls (deformity) once they have been produced, but BOTH are necessary for efficient control. Root drenching alone is effective, but takes longer. Apply insecticides in early spring, and again just after bud break for later blooming species. Dormant oil, carbaryl, dicofol (commercial only, in California), horticultural oils, and insecticidal soaps may be effective. Carbaryl (Sevin) is highly toxic to bees and should not be applied when they are active (i.e. when the aloe is in bloom). Orthene, used according to the directions, has been successful for some hobbyists but the formulation does not contain miticides. Based on experimentation, dimethoate is used by at least one aloe specialist, and does contain a miticide. Applying any chemicals to control aloe mites may also kill beneficial insects.

References:

<http://doacs.state.fl.us/pi/enpp/ento/entcirc/ent206.pdf>

<http://www.tolweb.org/Acari>

www.cals.arizona.edu/pubs/garden/az1399.pdf

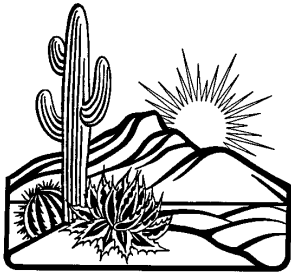
www.puyallup.wsu.edu/plantclinic/resources/pdf/pls89eriophyidmites.pdf

www.unce.unr.edu/publications/files/nr/2004/FS0447.pdf

<http://www.coopext.colostate.edu/TRA/PLANTS/index.html#http://www.coopext.colostate.edu/TRA/PLANTS/erio.html>

<http://www.extension.umn.edu/distribution/horticulture/DG1009.html>

http://essig.berkeley.edu/CIS/cis02_1.pdf



COMMUNIQUE
Newsletter of the San Gabriel Valley
Cactus and Succulent Society
C/o Evelyn Stevens
10119 ½ E Olive Street
Temple City, CA 91780

FIRST CLASS MAIL

If you have a cactus or succulent related event that you'd like to have announced in the **COMMUNIQUE**, please forward the information to the address given below. Please verify event dates - sometimes events are rescheduled or canceled without adequate advance notice. Articles, Notices and Corrections can be sent via E-mail to: sgv_css@prodigy.net or via post to: San Gabriel Valley Cactus and Succulent Society Newsletter Editor, c/o Evelyn Stevens, 10119 ½ E. Olive St., Temple City, CA 91780-3345. Material must be received by the last Thursday of the month to be considered for publication in the next issue of the **COMMUNIQUE**.

Material in the SGVCSS **COMMUNIQUE** may be reprinted by nonprofit organizations (unless such permission is expressly denied in a note accompanying the material) provided proper credit is given to the SGVCSS and the author and that one copy of the publication containing the reprinted material be sent to the editor. Reproduction in whole or part by any other organization or publication without the permission of the publisher is prohibited