

ESPINAS Y FLORES



Program

**WOODY MINNICH RETURNS TO SHARE DETAILS
OF HIS LATEST ADVENTURES**

Plants of the Month

**ISN'T A PLANT AT ALL, INSTEAD JEFF HARRIS
WILL PRESENT: *LEXICAL SUCCULENTISM*
AND AN UPDATE ON OUR LIBRARY**

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

Volume 40 Number 1
Saturday January 8th
1:00 PM Room 101 Casa Del Prado
Balboa Park, San Diego CA

Presidents Message

December 18th, 2004

Season's Greetings everyone!

We had a fantastic turnout for our annual Holiday party, and I hope everyone enjoyed themselves as much as I did. Michael Buckner's impromptu program celebrating Bob Taylor's life was a real treat. The membership honored Susan Hopkins with our "Volunteer of the Year" award, an incredible honor to receive in a society as deep and full of volunteer enthusiasm as ours is. Dinner was served with seconds and deserts, and the wine never ran out. The quality of plants available for gift exchange and auction were top-notch, and I sincerely hope no one was left wanting.

I am honored and humbled to be given the opportunity as your new President. I used to do all things Presidential for the Oregon Cactus and Succulent Society about ten years ago, but filling Ms. Badger's shoes will no doubt prove a challenge! Please don't hesitate to contact me if there's something I can do to help our society achieve it's goals.

The year ahead looks exciting, starting off with a bang and a Woody Minnach program at this January meeting. Jeff Harris has decided to combine both the cactus and succulent of the month into one literary

conundrum, and specifically talk about books! You go, El Jeffrey! Now's also a great time to start dusting off your plants for our annual Winter Show and Sale in February. We've got field trips and speakers lining up with talks from all over the globe and here in the states, and the 2005 CSSA convention in Phoenix this coming August, there are a lot of interesting plant-related things to anticipate in the year ahead.



Just remember it's your society, and ask not what your club can do for you, but what can you do for your club? Bearing that in mind we are all always looking for interesting ideas for plant-talks, programs, field-trips, new library books and the like. Now that the SDCSS has it's own digital projector, it is my hope that more of you will find the time to share your interests with us.

Warm wishes for a Happy New Year!

Cover: *Ariocarpus fissuratus* as seen through the lens of Jeff Harris

Mark Fryer



Fri Jul 9, 2004 02:11 AM ET

SYDNEY (Reuters) -

Australian scientists have identified the chemical in smoke that makes plant seeds germinate after bushfires, a discovery that could reap huge benefits for the agricultural sector.

A team of Australian scientists has become the world's first research team to pinpoint the previously unknown chemical, called a butenolide, which induces germination in a range of plant species including celery, parsley and echinacea. "This discovery represents one of the most significant advances in seed science with benefits in the natural, agricultural, conservation and restoration sciences," said Geoff Gallup, science minister in Western Australia state, on Friday.

Scientists say the discovery could give farmers a multi-million dollar edge in weed control by allowing them to speed up the germination of dormant seeds. "With further testing, this could help farmers who want to control crop weeds, without having to wait so long for the seeds to germinate again before being eradicated," said Kingsley Dixon, the scientist who directed the Western Australian study.

The findings could also lead to improved bush regeneration and conservation policies, scientists said.

Researchers around the world first became interested in identifying the chemical in smoke that caused seed germination when a team of South African botanists proved 15 years ago that it was bush smoke, not heat and ash, that caused plants to seed.

I'd like to take this opportunity to thank all of you for your cards, letters and phone calls. Especially I would like to thank Chris Miller for doing the December issue in my absence. No easy matter for sure. I have enjoyed putting together the newsletter for some two years now and look forward to the future. Thanks again to all, Paul Steward.

LEXICAL SUCCULENTISM

By, Jeff Harris

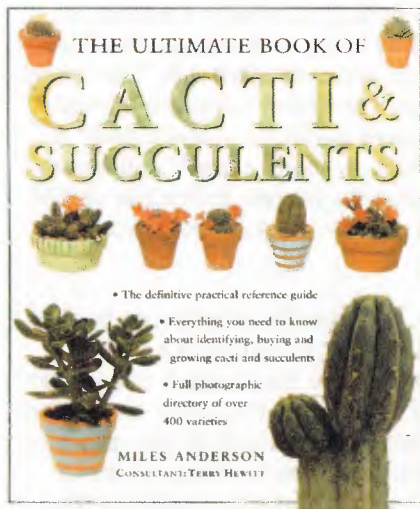
Perhaps my first motive in using this subject for a combined cactus/ other succulent article of the month was to give the members and patrons of the SDCSS a hearty and well-deserved thank you for purchasing so many plants, pots and other items; you've made it possible for the Society to commission the construction of a new bookshelf and to purchase lots of good books to put in the bookcase. I'm happy to have the books housed in a new home, their care in the capable hands of our librarians Janis, Phil and Phil. Or, on further reflection, it could be that, in my limited experience, no one has ever written and spoke about one of the cornerstones of our club. Certainly the reason I sit here contemplating my modest library of C&S books has nothing to do with the fact that this article should have been arranged months ago - you members are allowing a laggard to perform this task. I also wonder how best to describe to you these sources of knowledge, joy and fascination, some of which I enjoy every bit as much as they plants they describe.

Notwithstanding the above palaver, I'd like to introduce to a few books that continue to educate me (no small task). I'm hopeful that some of them might be new to you and give you cause to check them out from the library. To those few of you who may be completely and sufficiently familiar and quite possibly bored already with this

article, I can only offer my apologies and, if asked nicely, my offer to weed your Echinocactus garden.

Yes, onto the books. There is no particular rhyme or reason to the selection - none of them are highly technical, which fits my understanding of the plants quite well. They are general in scope, in terms of cactus and/or other succulent plants, the places they grow and how to grow them. Please note that some of them are written from a European perspective, in terms of cultural information, so it's wise to keep that in mind when reading those chapters. Another item to keep in mind is that the nomenclature in some of these is not necessarily that which prevails today; some are obsolete or of questionable validity and still others have either been Split or Lumped. There's also the fact that some of the books are rather dated, and many plants have been discovered and described since publication.

The Ultimate Book of Cacti and Succulents - He's a nice fellow, a great grower, and in addition to that he's written a book that is comprehensive for the beginning C&S enthusiast - if you're looking to commence your understanding of these wondrous plants of ours, you simply cannot go wrong with this book by Miles Anderson. While the title might be said to contain a bit of hyperbole, it's a clear favorite for those starting to grow the plants - in fact, were I a beginner, I'd suggest to me to that I get this book.



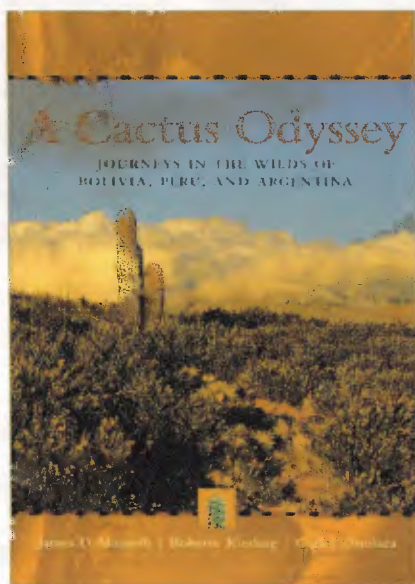
Grow Cacti A Practical Handbook - Grandpa always told me "Boy, never forget your first cactus book" and, by golly, I haven't. Cyril Marsden's book, No. 1 in the Cacticulture Series, is admittedly a bit long in the tooth, and also written in a very British style (well, he is British). However, any book that lists 25 different soil mixes and contains statements such as "A great deal of unadulterated rubbish has been written about cactus composts", in addition to having several very useful glossaries can't help but be fun reading. It concerns itself with only cactus, but it really covers that subject quite adequately.

A Cactus Odyssey Journeys in the Wilds of Bolivia, Peru and Argentina is a wonderful book to travel vicariously and read of the experiences of the three plant-hunting authors in these South American Countries. Their tales tantalize, instruct and inspire thoughts of 'Why don't I hop on a plane and get myself to Humahuaca (altitude 2713 m) to see *Austrocylindropuntia shaferi* in habitat, in flower and incredible.' Its style is more of a travel book than one

purely concerned with plants - an eminently readable and enjoyable work.

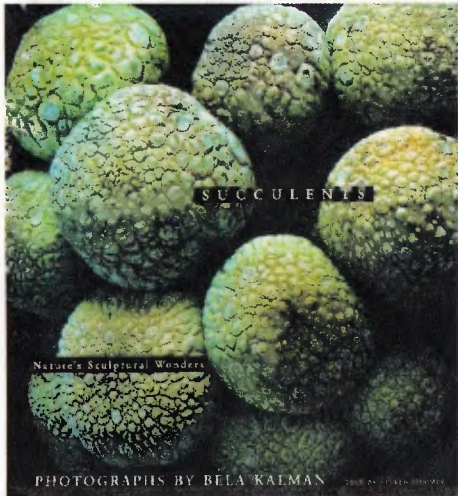
Staying with a cactaceous theme brings us to our next book. This book is indeed the ultimate Splitter's guide to our areoled friends. Cactus Lexicon, by Curt Backeberg, made me aware that there has been a great deal of naming going on - my first introduction to *Akersia*, *Catakia* and *Yungasocereus* took place in these very pages. It is a very useful book, has some fine photographs of plants in habitat and in flower. I recommend it highly, but its availability seems to be a little scarce.

My continuing fascination with succulent *Asclepiads* can be traced to Edgar Lamb's *Stapeliads in Cultivation*; this book is also the origin of my own very small skill in raising these orchids of the succulent world. Concise and easily understandable text, combined with sharp photographs of flowering plants, compel me to recommend this book to all *Asclep* aficionados. The same author, along with his son Brian,



also wrote a five-volume series on the cultivation of C&S - it's a good addition to your library.

Speaking of orchids, I would me remiss in not mentioning Orchid Fever by Eric Hansen. The text below the cover's title describes it perfectly - 'A Horticultural Tale of Love, Lust and Lunacy'. In my opinion we've all expended blood, sweat, tears and resources on our plant collection. Collected in this book are stories of people who have done that and more. Substitute the words 'cactus and succulent' for 'orchid' and Mr. Hansen is writing about people just like you and me, those that are passionate about plants and the extremes gone to satisfy those passions.



For sheer easy-on-the-eyes succulent photography that's simply stunning, Bèla Kalman's and Steve Hammer's Succulents Nature's Sculptural Wonders is the top. Mr. Kalman's photographs are like no others that I have seen (with the possible exception of Professor J. Durham's) in terms of color, contrast and texture) and the text

by Steven is linguistically lovely. Steven's writings are always a treat, as you may know from reading the CSSA Journal, but such gems as "The fleshy flowers of *Huernia primulina* combine the visual simplicity of Matise with a mephitic, fly-luring stench" are simply too good to relegate to the pile of 'just another cactus & succulent picture book'.

Generally, all of these books are available to you, as a member of the Society, to be checked out and enjoyed. My wish is for you to do so, and that wish also extends to you returning the book on time and in good condition, so that others may enjoy it. The library is an extraordinary resource for us.

There is little doubt that your favorite C&S book has not been mentioned here. To rectify that, I cordially invite you to bring that book with you to our January 2005 meeting. Since it is my wont to be totally unprepared for these talks (I'm likely to ramble until El Presidente McFryerburger asks me to stop), I ask that you join me on the soapbox and be prepared to say a few remarks on your book. I also am sedately frantic about getting volunteers for plant-of-the-month articles for 2005 (they don't always have to be about plants, either), so your assistance with that little time bomb would be vastly appreciated. There are only fourteen spots, so reserve yours early. Thank you!

Respectfully submitted,

Jeff Harris

Ants Protect Plants Better When Jacked Up On Nectar

Description:

Researchers report for the first time that when plants supply ants with nectar, it boosts the ants' desire for meat, potentially making them better bodyguards for the plant.

As ants roam around on a plant, they can help their leafy companion by killing any herbivores they find. Ants often do just that, because many ants need meat in their diets.

Some species of ants are more aggressive than others, and many plants don't have any choice about which species visit.

Researchers report for the first time that when plants supply ants with nectar, it boosts the ants' desire for meat, potentially making them better bodyguards for the plant. "If you have enough birthday cake or soda pop, you're eventually going to want something of substance," said team leader Joshua A. Ness, an ecologist at the University of Arizona in Tucson.

The same is true of ants, he said. And the most convenient protein packets for ants on plants are often insects that are there to munch on the plant. Nectar isn't just found in flowers. Many plants exude nectar from little pores on the plant, called extrafloral nectaries, that attract ants. "The plant wants ants to be protein eaters while they are on the plant," said team mem-

ber Judith L. Bronstein, a professor in UA's department of ecology and evolutionary biology. "The plant gets them really jacked up on carbs so they're desperate for protein."

Ness's presentation on the team's findings, "Contrasting the diet and aggressiveness of the ant bodyguards tending an extrafloral nectary-bearing plant," will be given at 10:10 a.m. on Wednesday, Aug. 4, in Room D135 of the Oregon Convention Center in Portland, Ore., at the annual meeting of the Ecological Society of America. Ecologist William F. Morris of Duke University in Durham, N.C., is also a team member. The research was funded by the National Science Foundation and the National Institutes of Health.

Ness and his colleagues study mutualisms, beneficial partnerships between species. In this case, the team studied the behavior of four species of ants that visit extrafloral nectaries on a common Sonoran desert plant known as barrel cactus, or *Ferocactus wislizeni*.

The carbohydrates and water supplied by the cacti are not readily available to ants elsewhere, Bronstein said.

In one experiment, the researchers sealed up the nectaries with rubber cement to see if the ants would abandon a nectary-free cactus. "The ants were very put out and pulled off the rubber cement to get at the nectar," Bronstein said. "By hook or by crook,

they will be going up there to get that nectar."

The ants clearly treasure the nectar available from the cacti. The researchers wanted to know what kind of value the ants gave the plant in return.

To see whether ants ate more meat when exposed to sugar, the researchers put baits of sugar and of meat at the base of barrel cactus plants and at the base of plants without extrafloral nectaries. For all four species, ants foraging by the cacti had a stronger preference for meat than did the same species of ants when foraging near other plants.

However, the ant species differed in the strength of their preference for meat.

To see how that might translate into plant protection, the researchers put caterpillars on cactus plants and measured how quickly each ant species recruited its fellows to the fresh meat and how many ants it took to vanquish five caterpillars in 30 minutes. Within five to 15 minutes, ant numbers rapidly increased, and ants were dismembering caterpillars. But although all four ant spe-

cies were equally good at recruiting their kindred to attack caterpillars, the species differed in their effectiveness at killing. Ant species that had shown greater preferences for meat in the previous experiment were also better protectors.

Even so, all four species did kill some caterpillars, so hosting even the wimpiest ant species was better for the plant than having no ants at all. The researchers also found that numbers matter: a lot of

the wimpy ants could eventually do as good a job of protection as a few of the more aggressive ants.

In addition, the results suggest that loading up a

mild-mannered ant on nectar makes the ant better at plant protection by increasing its cravings for meat.

Ness said, "If you pay your bodyguard up front, he or she could abandon you later, in your time of need. Here the act of collecting the reward makes the performance of the service more likely. No one has shown that before with ant bodyguards."

<http://www.newswise.com/articles/view/506288/>



MEMORABLE MOMENTS

By, Frank Thrombley

Editors Note:

SDC&SS Life Member Frank Thrombley wrote this excellent article highlighting some of the more memorable aspects of Bob Taylor's life. It appeared in the Espinas Y Flores some years ago. I regret my recent illness has prevented me from including it in a more timely manner..... Paul

Walking down memory lane with a gentle person; one who had many memorable moments that were shared with so many others is our walk into the past. He is a member of CSSA, Palomar Cactus Society and the San Diego Cactus & Succulent Society. BOB TAYLOR is indeed a kind and considerate person but he also is a horticulturist, a nurseryman and was an explorer. He explored botanically for the purpose of studying the plant



Mammillaria tayloriorum

life in habitat. He collected, for collecting was legal during that period, for the purpose of propagating and distributing material and information. When Marianne and I first joined the SDC&SS the annual picnic was held at

Bob & Suzanne's home and nursery in El Cajon. All were welcome and all could walk through the nursery to see the collection of outstanding plants.

Bob very seldom missed a meeting at the Palomar or San Diego Societies meetings. Too, he always entered a plant or plants in the annual show at SDC&SS. A member who believes in participating for the benefit

of all. Various discussions with Bob revealed his true love for finding and studying plants in the field, especially into Mexico.

Travelling in the State of Coahuila, Mexico between Saltillo and Monterrey, he came upon a large colony of AGAVE Victoria-reginae and collected many pups of these plants. He also found pups of AGAVE fer-

nandi-regis. After bringing them home he willingly gave 80% of them to fellow horticulturists. His travels have taken him through the States of Durango, Chihuahua and Sonora as well. He travelled extensively through the Baja Peninsula. On one of his trips he found two small seedlings of FEROCACTUS fordii growing so close that they were touching each other. Bob told me that he was sure they were from the same seed pod. What made them unusual? One had the normal red flower and the other had a bright yellow flower. (no the yellow flowered plant was not FEROCACTUS viridescens) This find was on the southeast side of the main road at El Socorro. Both of these plants were brought home then disappeared from his nursery.

In the year 1960, Bob Taylor found the second known plant of PACHGEROCEREUS orcuttii. A natural hybrid between PACHYCEREUS pringlei and BERGEROCACTUS emoryi. He discovered this at El Rosario, Baja near the foothills of Sierra San Pedro Martir. Cuttings of this plant were grown by Bob in his nursery at El Cajon. Cuttings from his plant have been given to many nurserymen, horticulturists and collectors of cactus. The hobbyist of the SDC&SS certainly benefited from his generous nature. The Wild Animal Park has two of these plants growing in their Baja garden.

This is a very brief and condensed statement in these few paragraphs of our friend. However, before ending this synopsis I would like to reiterate what Michael Buckner printed in the June/July 1993 issue of Espinas y Flores. 'Bob Foster and Charlie Glass have discovered and/or described twenty eight new species of cacti - in-

cluding MAMMILLARIA tayloriorum named in honor of BOB and SUZANNE TAYLOR.

Thank you Bob for all that you have done for this hobby.



Mammillaria tayloriorum, flower & fruit



Mammillaria tayloriorum, distribution map

Upcoming Events

2005

January 8: San Diego Bromeliad Society — Exotic Bromeliad Auction 10:00 AM Balboa Park, Casa Del Prado, Room 104. information: rvitacco@cox.net. Proceeds support the World Bromeliad Conference, San Diego, 2006. Plant Donations accepted.

January 15: CSSA Board Meeting at Huntington Botanical Gardens

February 12: SDC&SS Winter Show- details to follow

April 16: CSSA Board Meeting at Huntington Botanical Gardens

May 21: First Annual Encinitas Garden Festival and Gardeners Marketplace. Info: arosado@ci.encinitas.ca.us

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 Collette, Chuck Hanson, John Lavranos, Mark Muradian, Gard Roper, Guy Wrinkle.

2006

January 14 CSSA Board Meeting, Ahmanson Class Room, HBG

April 15 CSSA Board Meeting, Ahmanson Class Room, HBG

June 30 - July 2 CSSA Show and Sale, HBG

August 17 - 20 British C&SS International Convention at Loughborough University in England. Speakers from Argentina, Australia, South Africa and the USA already confirmed. For further details contact David Kirkbright, 71 Lakes Lane, Newport Pagnell, MK16 8HT, England, or e-mail at: Kirkbright@bcandss.fsnet.co.uk

September 2 : 23rd Huntington Symposium, HBG

September 3 : CSSA Board Meeting, Ahmanson Class Room, HBG

September : Succulenticon 2006 in Perth, Western Australia. Sponsored by the C&SS of West Australia, Contact Shirley Laslett, Secretary, at 348 Hardey Rd, Cloverdale, W. Australia 6105, Australia.

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