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ON THE COVER

Notocactus roseoluteus. Generally in habitat the plants can be found amongst the flatlands of Southern Brazil to Northern Argentina. Quite some time ago Notocactus were merged into the older genus of Parodia but many enthusiasts still like to use Notocactus on their plant labels, I fall into this category.

Here in Australia I grow Notocactus roseoluteus in a free draining soil mix with added humus, Notocactus won’t grow well in an alkaline soil mixture. In summer give the plants direct sun till midday and then bright light for the rest of the day, don’t be afraid to water liberally. During spring and autumn water regularly, in winter refrain from watering if low temperatures (32° F) are expected, best minimum temperature is 40° to 50° F

After flowering, if fruit has developed and when ripe, it will stretch or elongate to indicate its readiness to be picked, this is your chance to get the seed before the ants carry it away!

Photo © Terry Adema, Australia
RESIDENT’S LETTER

I don’t know about you but I’m looking forward to the New Year! Despite the downturn in the economy I’m optimistic that 2009 will be a good year for the CACSS and its members. It’s a privilege to serve as President again for another year and I welcome back those Board Members who have served in the past. I’d also like to extend a warm welcome to our newest Board Members, Cheryl Brown and Rick Rosenberg. Having new smiles and contributions at the Board meetings is always appreciated! A heartfelt thank you also goes to the people who volunteered again to keep the behind-the-scenes things happening (i.e., library: Erik, refreshments: Gard & Melinda, newsletter: Laurence & Paul, etc.). We also have a new set of modestly updated By-laws for the future and hopefully we can get those posted on the CACSS website before long.

Our December Christmas Party was quite the success and the attendance was unbelievable (at least 70 guests!). In special tribute to a few of our long standing members the Board last year decided to bestow lifetime memberships upon Jim and Electra Elliot and Stan and Joan Skirvin. As the certificates we presented state: “In gratitude for their many years of outstanding service, leadership and contribution to the Society”. I’ve been involved with many clubs over the years and have found that people like the Elliott’s and the Skirvin’s add richness to a society that can’t be measured. What an honor it is that they are a part of the CACSS!

In a few short months we’ve got a couple of fun events that shouldn’t be missed! The CACSS annual show and sale is in March this year and the CSSA Convention, which will be held in Tucson, is in April. It’s not too early to be thinking about plants you’d like to bring to the show and Cynthia Robinson has printed up those wonderfully colorful postcards (with show information) for distribution to everyone you know (I envision Leo Martin putting a postcard on every patient food tray at the hospital!). With the CSSA Convention just down the road this year there’s no reason we shouldn’t have a good turnout of CACSS members there, right? Check out www.cssainc.org/2009conference for the great program and events schedule!

I’ve been trying to think of how we can improve getting people and plants together at our meetings and sometimes it helps to reflect on old ideas. Numerous clubs around the country have a plant-of-the-month display or mini-show that features a cactus genus and a succulent genus. It’s kind of an expanded version of show-and-tell. Basically if the cactus-of-the-month is Mammillaria and the succulent-of-the-month is Aloe and you happen to have a few nice specimens of those in your collection then bring one or two to the meeting. We’ll have a place set up to display the plants together and then at some point in the meeting we can talk about them. This is a great way to get those odd plants you don’t know the species name for identified by some of our more knowledgeable members. Following this letter is the cactus-and-succulent-of-the-month selections for the next three months. Give it a try...it’s fun!

See you at the meeting! - Steve Plath

Central Arizona Cactus & Succulent Society

2009 Plant-of-the-Month Selection - a.k.a. Mini Show

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<thead>
<tr>
<th>Month</th>
<th>Cactus</th>
<th>Succulent</th>
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<tbody>
<tr>
<td>January</td>
<td>Eriosyce (Neoporteria, Neochilenia, etc.)</td>
<td>Dudleya &amp; Echeveria</td>
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<tr>
<td>February</td>
<td>Gymnochalyum</td>
<td>Aloe</td>
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<tr>
<td>March</td>
<td>No mini show because of the Annual Show and Sale</td>
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From the editor ...

A huge thank you to all who have contributed to this issue of the Central Spine including Terry Adema for the cover photo and our contributors Cliff Fielding, Bob Torrest, and Doug Dawson. Currently, the February issue is empty, so please feel free to fill it up.

Also, thank you to all who have emailed me photos for our newsletter. I currently have a stock of unused photos, but please do not let that deter you from sending more. Some members have asked for advice on emailing photos to me so here are some general guidelines. The file size is a good indication of whether the photo will have sufficient resolution when printed. In general, jpeg files between 250 and 500 kb in size are suitable for photos, such as those in the Gibbaeum article in this issue.

Laurence Garvie

Obviously, larger files are required for those special photos that need to occupy more area of a page. For example, a typical jpeg image for the cover is on the order of 2 Mb and above. The previous examples of files sizes assume that you are saving your images in jpeg format. Point-and-shoot digital cameras typically save in this format, unless you specify otherwise. So for most photographers, just using the standard auto mode will produce the desired results. While it is not really important here what jpeg format is, just remember that putting your camera on the low jpeg setting will allow you to save more photographs on your digital camera, but will have the side effect of producing poorer quality images. If this all sounds complicated, it is a little, and that’s why your camera came with a 200+ page manual.
Messing with the Mesembs: Gibbaeums
Cliff Fielding

Mesembs are delightful small plants that can be easy to grow in the Phoenix area. I have been growing them for about 12 years. I have been killing them for about the same length of time. Therefore, this article is not an expert providing you with the recipe for success, but merely the observations of a grower that loves these beautiful plants.

Gibbaeums are small very slow growing succulents that often form small dense clumps with age. They can be distinguished from other Mesembs by the two unequal leaf pairs that differ in both shape and size. These leaves can be smooth or minutely hairy giving them a delightful velvety texture.

When I saw my first Gibbaeum album it was love at first sight. As with many plant romances it did not last through its first summer. I began to notice that not many retailers or growers had Gibbaeums in stock. Plants for the Southwest in Tucson had a few but they were not for sale and I was told they were hard to keep. Not one to listen to good advice I ordered one or two from another true expert on Mesembs, Steven Hammer. The romance became an infatuation when I visited Mesa garden in Belen, New Mexico. There was, among thousands of amazing plants, a huge pot filled with large fuzzy red and green cherries (G. pilosum). Wow! Another pot was filled with little silver fuzzy shark heads swimming around (G. pubescens). None of the plants were for sale at Mesa Garden. However, through their website an endless variety of seed was available.

Eight years ago I planted many varieties of Gibbaeum seeds from Mesa Garden and have learned a lot about keeping them alive. I am still a long way from learning all their secrets. It helps to understand what the climate is like where they grow. They mostly come from the Little Karoo area in South Africa. This growing area is just north and east of the tip of South Africa. It lies at a low altitude between two mountain ranges, the southern range separating it from the ocean. The large outcroppings of white quartz, throughout the little Karoo, is where most of the Gibbaeums can be found. The climate is very mild with frost in the winter and 110° F the high in the summer. A scant 8 inches of rain falls mainly in the summer and winter. This sounds a lot like our weather in Phoenix. These plants should be easy here. The only difference is our very high nighttime lows (above 80° F for months). Sacrificing plants and seedlings has lead me to believe that only G. dispar, G. schwantesii, and G. neobrownii can survive our summer nighttime heat outdoors. The rest I bring indoors when the nighttime lows is above 80° F. The tricky part (for me) is knowing when to water in the summer. It rains in the summer in their native habitat so they like some water in the summer if they are inside or outside. A lot of water in the summer in or out will kill them. Inside plants I keep in a southeast window with some screening. I water very lightly when wrinkles show up on the skin. Water lightly until the wrinkles disappear. Care of the plants outside is not much different. After the nighttime temperatures stay above 80° F they will only get a light watering when wrinkles are forming on the skin. I will let them get a little monsoon rain. A full soaking of the pot will often lead to the plant bursting; they cannot stop soaking up water. A recent tour of the new succulent garden at the Phoenix Botanic Garden revealed several Gibbaeums that were not only crisscrossed with bursting scars but had been pecked full of holes by the birds. These were fantastic plants when first planted but are now very ugly. Most surprising was that both Gibbaeums survived the summer. In the winter they can tolerate a lot more water but will burst if given too much. In habitat they grow in full sun or in the shade of a small shrub. They tend to look best when given a lot of sun.

The first Gibbaeum I ever got from S. Hammer, G. cryptopodium, is still alive after seven years but it does not flower regularly. I brought in 100 seedlings of six different varieties in one pot a little too late last summer and lost all but five G. heathii. The struggle goes on. The surviving plants from the first batch of seeds keep looking better and better each year. These slow and beautiful plants are well worth the extra effort. If you would like more information on Gibbaeums, "Mesembs of the World " by Smith and Hammer, and "Vygies" By E.J van Jaarsveld are good places to start.
Gibbaeum velutinum

Gibbaeum dispar

Gibbaeum gibbosum

Gibbaeum pilosum

Gibbaeum geminum
December 1st, 2008 - This is the time of year when many varieties of aloes begin to flower and why you should have some in your garden. One of the best, Aloe ramosissima, getting started now, has bright yellow flower spikes. Our largest is 6.5 feet tall with a 5 foot spread at the top and the branching trunk always looks great. Aloe cryptopoda with its colorful flowers began in early November. By mid-November A. pirottae was flowering with its 6ft spike. Aloe branddraaiensis has a branched inflorescence with coral flowers. The small but colorful A. krapohlana has blue leaves and red flowers. Aloe vaombe, a medium large plant, is starting to spike and will soon have multiple stalks of red flowers. The leaves get an attractive bronzy look in the sun. Aloe arborescens is flowering in San Diego and will get started here later this month. The very attractive variegated form is more frost sensitive but worth a try if you can protect it. A couple of the best flowering aloes are still unidentified...if you can help with the I.D. you get one. Also, with aloe flowers you’ve got hummingbirds even without feeders.

Cascalotes (Caesalpinia cacalaco) and Chorisia speciosa are the standouts of the currently flowering trees. But there are all the usuals including Acacias aneura, salicina, fariniana and craspedocarpa (Leatherleaf). Shrubs flowering include Cape honeysuckle Tecormia capensis), Yellow bells (Tecoma stans), Calliandra californica, Ruellia peninsularis, Flame anisacanthus and Cassia phylodes. There is a new shrub, Tagetes lemmonii (Mount Lemmon marigold) from Tohono Chul Park in Tucson. The Plant Shop there usually has a nice selection of foliage plants in addition to succulents. There is even some color from leaves and berries.

While a far cry from New England in the fall, yellow leaves on Honeylocust, pomegranate and Chinaberry provide color as do clusters of red berries on Pistacia, yellow on Chinaberry and purple fruit on the very fragrant and dark green evergreen Myrthus communis “Boetica” (twisted Myrtle).

While not the high season for flowering cacti there are always a few. Coryphantha elephantidens continued through most of November. You can’t miss Cochemiea pondii with its bright red tubular flowers (now usually included with mammillarias). Stenocereus beneckeii flowered for the first time at 5 ft with three yellow flowers at the top. The small purple flowers of Ferocactus latispinus are dependable about now, and even some of the Golden barrels (Echinocactus grusonii) were flowering again. Rabbits have lately developed a taste for some varieties of cacti never eaten before. Ribs of Astrophytum myriostigma have been removed. A Ferocactus glaucescens had all the ribs eaten so that all that remained was a white ball. Other barrels not heavily spined were nibbled. Even Echinocactus platyacanthus with its strong spines had bits of the ribs removed. All this occurred even though pruned pads of several different opuntias were left on the ground for the beasts. This new generation of super rabbit has even pruned a couple aloes and agaves never before disturbed. Wire rings will protect plants you don’t want damaged and light shade cloth works for a while. So far the “native” barrels, organ pipes, senitas, and most heavily spined plants or those that are woody near the ground have been untouched. These clever rabbits are free to anyone who wants some!

P.S. - Thanks again to those of you who came to our DESERT PLANTS SALE AND GIVE-AWAY. Remember that any plants you purchased are guaranteed. Please call or e-mail if there are any questions or problems. Our next SALE will be on Saturday March 21st and probably Sunday, with a good variety of landscape and collector plants. We probably have what you are looking for...please call to see if we do. With a call in advance we can have the plants you want ready for you.
All of us possess plants which seem to have special needs which are difficult for us to unravel. When should I water it, how much, can it take our heat, etc? One very important piece of the puzzle is to understand the climate conditions where the plant originates. A very useful website for this information is found at Weather Underground: www.wunderground.com/

As an example, I have some plants which are native to the Springbok, South Africa area. I went to the website, typed in Springbok, and on the new screen which came up, there was quite a bit of information for today’s date, even elevation, forecast for several days, etc. Digging deeper, you can go to the “History & Almanac” area and change the year to 2007 and click “view”. It then will give a daily summary. Click on “Monthly”. On the new screen scroll down and you will see an entire month’s calendar and in each box will be high and low temp and precipitation measure. You can also choose “next month” to get other month calendars and stats.

So you can see that if you use this website to do some in depth exploration, you will get quite an accurate view of the weather and climate there. This is important, since I have found that just asking people who have visited there or live there is not always accurate. For example, if a non Phoenician asks someone who lives here: “How are summers in Phoenix?”, they may hear “Oh, it gets up as high as 122° F in the summer!” [It did this once about 17 years ago.] As you can see, people often speak in superlatives, rather than giving a more accurate picture.

Get the hard core stats by visiting www.wunderground.com/

Not every city or town is in the wunderground information bank, but many are. I have also explored Windhoek, Namibia, and Oudtshoorn, South Africa, and many other world localities. None of the plant books I have read have given me nearly as accurate a look into the climate and conditions.

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**MISCELLANEA**

**DUES**

Pay your dues! Membership is by calendar year. Annual dues $20 individual (1 newsletter, 1 vote), $25 household (1 newsletter, 1 vote per member); 1/2 price paid August-December. Make checks payable to and mail to: CACSS, PO Box 63572, Phoenix, AZ 85082-3572. More info: 602-852-9714.

**CACSS WEBSITE UPDATES**

Please check out the new additions and changes to the CACSS website. We have even more new changes coming in the near future. Soon to be added will be helpful articles and reference materials, including a search capability (a great big “thank you!” to Sue Hakala and Diana Decker for all their hard work in getting these articles prepared)! If you have not already done so, be sure to check it out at www.centralarizonacactus.org/

If you have any suggestions or ideas please contact Melinda Louise at 602-326-1684 or email melindalouise@hotmail.com

**PUMICE FOR SALE**

If anyone is interested in buying some pumice, I can bring bags of pumice to the meeting on Sunday. One bag - equivalent to a 5 gallon bucket full - is $2.00. Email me if you want some and how many bags you would like.

Lee Brownson - lsbrownson@cox.net

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**THE POINT OF MISCELLANEA**

This page is reserved for news snippets, announcements, items for sale etc. Email contributions to lgarvie@cox.net

**PHOTOS NEEDED**

Would you like to see your best photographs adorn the cover of Central Spine? Well then send them to me. Initially, send me medium-sized jpeg images. If your image is chosen for the cover then I will request a higher resolution image. Please keep photo editing to a minimum. If necessary I will adjust contrast, color, etc.

Email contributions to lgarvie@cox.net

**NAME BADGES**

Interested in one of the name badges you see other members wearing? You can have one of your very own! Talk to Jo Davis at the meeting or send her a check for $7.50, made out to "Jo Davis" to her home address:

2714 W. Monte Ave, Mesa, AZ 85202

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Doug Dawson
PLANT QUESTIONS???

WHOM TO CONTACT!!!

Many CACSS members have experience with different kinds of succulent plants. I hope they will add their names to the following list (just call or e-mail Bob Torrest). For now the list is simply alphabetical with principal interests. When more members add their information, the list will be cross-referenced by topic.

**DOUG DAWSON**
480-893-1207
doug.dawson@gcmail.maricopa.edu
Specializations include Flora of Namibia, Growing from Seed, Lithops, other Mesembs, and Melocactus.

**MIKE GALLAGHER**
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Specializations include Aloes, Haworthias, Columnar Cacti, and Turbinicarpus.

**STEVE PLATH**
623-915-7615
revegedude1@juno.com
Specializations include Ariocarpus, Astrophytum, Cyphostemma, Echinocereus, Fouquieria, Thelocactus, General Propagation, and Desert Revegetation.

**CYNTHIA ROBINSON**
602-615-2261
crobin500@msn.com
Specializations include Flora of Madagascar, Growing from Seed, Caudiciform & Pachycaul Succulents, Aloes, Apocynaceae, Burseraceae, Euphorbiaceae, Fouquieriaceae, and Succulent Bonsai.

**BOB TORREST**
480-994-3868
robertst9114@msn.com
Specializations include Desert Landscaping, Unusual (including Rare Fruit) Trees and Shrubs, Aloes, Agaves, Columnar Cacti, Trichocereus, and Opuntia.