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Kaktos Komments

a bimonthly publication of the Houston Cactus and Succulent Society
to promote the study of cacti and other succulents



Epiphyllum hybrid
by Karla Halpaap-Wood

From the editor

Karla Halpaap-Wood

Happy New Year.

I want to thank everybody who contributed to this KK, especially Wally with his article about *Salicornia bigelovii*. I would like to encourage more members to contribute to the KK. Send me your ideas or interesting articles you find. Also, we all like to see other member's plants, can be a collection of pictures, your favorite plants or a special picture for the cover of the KK.

Membership

Kathy Fewox

Attending the November 16th meeting of HCSS were fifteen members. Joining us were two guests, Teresa S. Garcia and Wei-Chung Su. Some nice door prizes were given away. Daryl Rebrovich took home a Manfreda, donated by Dick and Phyllis McEuen. Paul Stricklin brought in a *Haworthia*, which was won by Robert Smith. Cindy Gray donated two *Agave* plants, which were won by Paul Stricklin and Wei-Chung Su.

On December 4th we held our annual holiday dinner at Riva's Italian Restaurant. As usual, Riva's had over-the-top Christmas decorations, adding to the festive atmosphere of the evening. Everyone present enjoyed the excellent company and the wonderful food. Those of you who were unable to attend were greatly missed.

As always, please send any news of HCSS members and their families to kathyfewox@aim.com.



Photos by Liliana Cracraft

President's Message for 2017

We are looking back on a year when we finally got a home again and ceased being the Cactus Club Nomads. We had excellent sales at our various venues, and were able to establish the Leroy Kellogg Cactus Award. That was very special to many of us who have known Leroy for so long and are aware of how very much he has done for the club. We had a couple of very good field trips, not to mention all the wonderful programs presented at our meetings, fun plant exchanges, etc.

For the good things that happened during 2016, I would like to thank our loyal and hard-working team who just do what needs to be done, whether busy with work or personal matters, ill, or just plain tired. You all know who you are, and most of you comprise the Board of Directors. It is such a pleasure to know and work with you all.

2017 will be a busy year. In addition to our regular Home and Garden sale, spring sale, and fall show and sale, we will be hosting TACSS in October. You will all be called upon to help out because there will be a lot of work to be done. None of it is hard, we always somehow manage to have fun, and its a great way to get to know each other.

For newer members who haven't been with us very long, we welcome you all and look forward to getting to know you. Don't be shy. We were all new members once upon a time. We all learn from one another and new ideas invigorate the ones of us who have been around a while.

So here's to a wonderful 2017

Josie Watts, President, HCSS

Calendar:

| | |
|-----------------------|--|
| January 11 | 7:30 pm Board Meeting at Metropolitan Multi-Service Center. |
| January 25 | 7:30 pm Membership Meeting at Metropolitan Multi-Service Center. Jacob Martin, Greenhouse Manager, Mercer Botanic Gardens will give a talk about the cacti and succulents they have at the garden and some of the propagation procedures they use. |
| February 17-19 | Home and Garden Show at NRG stadium |
| February 22 | 7:30 pm Membership Meeting at Metropolitan Multi-Service Center. A Rocks Garden - A Magical Transformation by Liliana Cracraft An introduction to an interesting project realized throughout 13 years to restore cactus, insects, birds, reptiles and mammals through a labor of love in an area near the Tequilera Ranch in Tamaulipas, México. |
| February 28 | Deadline for submissions for March/April KK |

Salicornia bigelovii Torr.**Wally Ward**

Succulent plants are not confined to conventional deserts. Visitors to Galveston Island State Park who visit either the Gulf side or the Galveston-Bay side of the Park will find a number of succulent plant species, including some whose roots are within inches of the salty groundwater in the sand near the seashore or the Bay. One such plant is *Salicornia bigelovii*, commonly known as saltwort or glasswort. It is very abundant in salt marshes from New England to Texas and also in California and Baja California. I have attached one photo showing a mass of *S. bigelovii* near the shore of Galveston Bay and another picture of an individual plant with roots. Plants that share a high salt tolerance are known collectively as halophytes. *S. bigelovii* has specific preferences for salt marshes with sparse or low vegetation.

I have a history with this plant dating back to October 1971, when my marine biology class went on a field trip to the University of Delaware Marine Biological Station on Delaware Bay near Lewes, DE. There was a substantial salty marsh in the area with abundant *Salicornia*. Our professor told us the plant is edible, so I tried a stem. It tasted bland with a hint of salt. I also began noticing the plant in the marshy areas behind Quintana Beach offshore of Freeport, TX. A large, beautiful butterfly known as the Great Southern White uses *Salicornia* as a caterpillar host plant, and during birding trips to Quintana in warm weather I would notice numerous butterflies of this species nectaring among wildflowers near the beach.



There are two similar species of *Salicornia* along the Texas coast that can be difficult to distinguish. *S. bigelovii* is erect, while the stems of *S. virginica* run along the ground, exhibiting prostrate growth. I believe the species I have photographed for this article is *S. bigelovii* since it grows vertically.

Salicornia yields salad greens and a high-quality oil from its seeds. Meal made from the oil and seeds can replace soybeans in chickenfeed, although saponins, which inhibit growth, must be blocked in the oil by adding cholesterol. Soda ash from the plant can be used to make glass: hence the common name "glasswort." *Salicornia* can be cultivated by using seawater for irrigation and is believed to have potential as a valuable new oilseed crop for subtropical coastal deserts. Research has disclosed that *Salicornia* is a nitrogen-fixer because of symbiotic bacteria that live among the roots and form symbiotic relationships with the plant. Nitrogen is an important limiting element for plant growth, but abundant atmospheric nitrogen is tightly bound as N_2 and, consequently, not available to plants in its natural gaseous form. It takes a great deal of energy for microbes to convert atmospheric nitrogen to ammonia (NH_3) and hence to plant fertilizer. The symbiosis arises when the *Salicornia* provides abundant sugars from photosynthesis to the bacteria, and the bacteria then metabolize the sugars to generate the large amount of energy needed to break the N_2 triple covalent bond as the necessary foundation for fixing the nitrogen into ammonia.

If you visit the stands of *Salicornia bigelovii* along the bay shore in Galveston Island State Park, you may not notice much going on. But a remarkable succulent plant is flourishing at your feet, contributing ammonia

fertilizer to the various bay-side plants around you, and producing a nutritious vegetable resource that can be used by animals and people.

References

Alfred Richardson. *Wildflowers and Other Plants of Texas Beaches and Islands*. Austin: University of Texas Press (2002)

Edward P. Glenn, et al. "Salicornia bigelovii Torr.: An Oilseed Halophyte for Seawater Irrigation." *Science* vol. 251, issue 4997, pp. 1065-1067 (1991).

"Salicornia bigelovii Torr.: dwarf glasswort." Go Botany Project [2.5], New England Wildflower Society.

E. Rueda-Puente, et al. "Effects of a Nitrogen-Fixing Indigenous Bacterium (*Klebsiella pneumoniae*) on the Growth and Development of the Haplophyte *Salicornia bigelovii* as a New Crop for Saline Environments." *Journal of Agronomy and Crop Science* vol. 189, no. 5. pp. 323-332 (2003).

Stephen G. Wagner. "Biological Nitrogen Fixation." *Nature Education Knowledge* 3(10): 15 (2011).



January Cactus of the Month

Karla Halpaap-Wood

Rhipsalis - Coral cacti - Mistletoe cacti

Family: Cactaceae

Genus: Rhipsalis

Name is derived from the greek rhips = wicker work in allusion to thin pliable interlacing branches. Some of the cylindrical stems resemble coral, therefore the name coral cactus. But the shoots have widely different shapes, some with broadened leaf like stems that resemble epiphyllums. All have the important characteristic of a cactus, the areole. Areoles are small, sometimes noticeable only on new growth. They are epiphytic (or lithophytic) cactus that occur frequently on tree trunks, or sometimes on rocks.

There are over 50 species some difficult to identify.

Distribution

Rhipsalis are native to Central America and northern South America, many from Brazil. But It is also the only genus of Cacti that has representatives in the Old World.

Cultivation

They are easy to grow in Houston, need moisture and light shade in the summer. Can be grown in orchid baskets, in orchid mix, peat, sphagnum, fern roots or some compost.

They grow in the summer and generally bloom in winter. After the growing season they can be kept drier, then will bloom. The flowers are small and appear from the areoles. In some they form only on the end of the branches, in others all around the outside of the leaves. Most form small round fruit, white or colored.

Propagation

Either from seeds or cuttings

Here is a selection of species that I grow:

Rhipsalis cereuscula -rice cactus, coral-cactus, Mistletoe Cactus

shrubby plant, flowers open for several days, terminal or near the ends of the branches

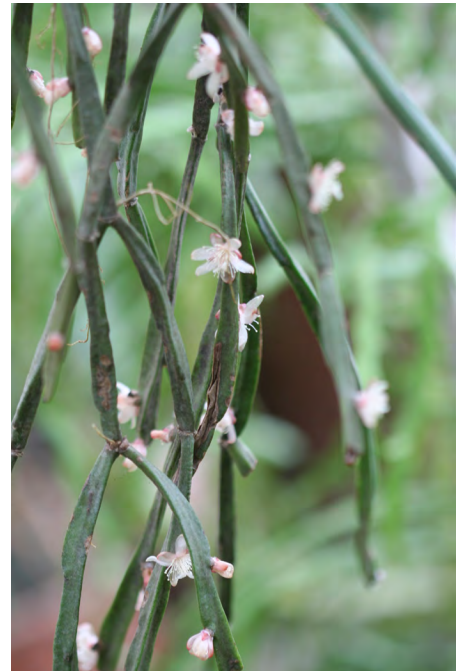
Rhipsalis horrida 'Mouse Tail Cactus'



R. horrida on left, *R. cereuscula* right

Rhipsalis trigona
branched, 3-angled stems 1.5 cm diameter, flowers white or pinkish

Rhipsalis ewaldiana
4-angled and 3-angled stems, very narrow 4 mm thick stems, small white flowers, reddish fruit



R. trigona



Rhipsalis ewaldiana

Rhipsalis crispata
Stem branching freely. Branches jointed and flat, like *Epiphyllum*. Margins of joints notched. Small flowers like all rhipsalis, fruits pea like.

Rhipsalis elliptical



Rhipsalis crispata



Rhipsalis elliptical

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February Cactus of the Month

Richard Holland

- **NAME:** *Mammillaria vetula* ssp. *gracilis*
- **SYNONYMS:** *Mammillaria gracilis gracilis*
- **COMMON NAME(S):** Thimble Plant, Monstrose cv. 'Arizona Snowcap'.
- **HABITAT/DISTRIBUTION:** SSP. *Gracilis* is native to Hidalgo, Guanajuato and Queretaro (Central Mexico). 'Arizona Snowcap' is a nursery produced cultivar.
- **DESCRIPTION (STEM, FLOWERS, and FRUITS):** Stems are up to one inch thick. Clumps can spread to 12 inches in diameter. Flowers are satiny creamy yellow. They come out in late winter.



- **CULTIVATION/GROWTH:** Plants accept Full Sun to Light Shade. Full sun is better for the monstrose version. Required well drained sandy soil. Ph between 6.1 to 7.8(neutral). Restricted water in the winter time. Plant is subject to root and fungal rot in poor draining soil. Plant grows in temperature zone 9a. Fertilize the plant only once a year in mid spring. Plant blooms in late summer in to fall. The monstrose 'Arizona Snowcap' is common but rarely cultivated. It has thicker and densely packed spines. Cold tolerance is 20 to 25 deg. F. Protect from frost scaring. Cuttings will break off the main plant very easily. Propagation is by division of older clumps, off-shoots or seeds. The fruit should be left on the plant until it is very ripe. Then separated and dried. Plant in spring after last frost.

- **AVAILABILITY (OPTIONAL):** The standard form is frequently found but the monstrose form is found less frequently. I got my 'Arizona Snowcap' at Home Depot.

- **REMARKS/COMMENTS/MY EXPERIENCE:** I have had the standard form for a long time but this is the first time that I have seen it bloom. I haven't tried to propagate the 'Arizona Snowcap' yet. The cactus on the left is the 'Arizona Snowcap'.

- **REFERENCES:** Plantoftheweek.org/week381/shtml
Davesgarden.com/guides/pf/go/94770



February Succulent of the Month**Dick McEuen**

Pachypodium saundersii

FAMILY: Apocynaceae(a-poc-in-a-see-ee) Dogbone family from Greek apo (away from) and kuan(dog)

GENUS: Pachypodium (pak-uh-po-dee-um) From Greek pachus(thick) and podos(foot)

SPECIES: Saundersii (son-der-see-eye) Named for the botanist who discovered it in South Africa in the late 1800s. There are 25 known species. Of these, 20 are from Madagascar.

SYNONYMS: *Pachypodium lelii* var. *saundersii* and Star of Lundi

Although the genus name refers to the thick foot, many (most?) members of the genus are actually pachycaul (origin Greek from thick stem). The thick parts of the plant contain cells which store water, and processed plant food. In some cases the plant's thick section is actually able to use photosynthesis to produce energy when the plant has no leaves.

True to its genus name, *saundersii* actually has a thick base. It forms a nice caudex as it ages which has a few spines. The branches rise from the base and can be trimmed to force more branches. Trimming however leaves scars which may never heal. It is best to keep this activity to a minimum.

The leaves are shiny medium to dark green and are deciduous. Flowers are white with a tinge of pink. The plants seem to be slow to flower. They are also reported to be difficult to pollinate by hand., an activity best accomplished by leaving the plant outdoors and let nature take its course. When ours began to flower we soon were rewarded with seeds.

The seeds are born on a structure which resembles the top portion of a Y. The seeds are incased in a light fluffy material and when mature they will fly away unless restrained in some way. Last fall was the first time we had seeds and they were wrapped in something like sheer nylon stockings. It worked well. We had a lot of seeds and many of them germinated.

That was from one pair of seed pods. This year we seem to have four sets of these seed pods so who knows how many seeds we will have. Although the plants are deciduous and lose their leaves in the fall, the seedlings seem to be retaining their leaves. I attribute this to them being raised in a terrarium with a fairly constant supply of moisture.

This plant has been featured in the KK twice, first by Evelyn Etter in October 1993. Her major points were that her plant had never produced seeds; it had proved to be impossible to pollinate by hand; and it grew so rapidly that it became difficult to lift and carry. Fred Hasse featured it in November 2005. He also reported it to be difficult to pollinate by hand and included other interesting bits of information. These articles are available on the club's website for anyone who wants to see them.

Our plant was inherited. In 2004 Phyllis' Mother was visiting here in Sugar Land. We took her with us to visit Lisa and Paul Kibler's spring sale. She registered and won the plant in a raffle drawing. We got the plant when she passed away.



We aren't certain when ours first bloomed, but last year was the first year it set seed. This year it has seven seed pods which normally occur in pairs but one pod aborted. The seeds will mature in late January or February. The seeds are encased in a light fuzzy growth and will be blown away if not protected.

Seeds for this species are available for purchase on the Internet, postage paid.



This photo taken in late November 2016 shows the plants from last year's seeds. The largest ones are about 4 inches tall and the smallest ones about 1 inch tall. The plants do not appear to be losing their leaves and I attribute that to them being grown in a terrarium with a high moisture environment. There are about 30 plants from last year.

REFERENCES

Davesgarden.com

Wikipedia.com

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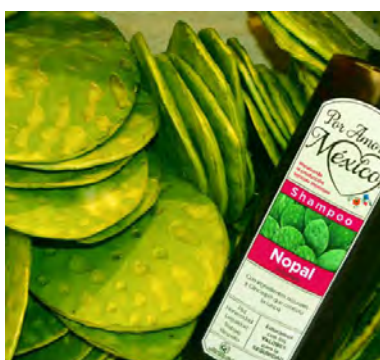
NEW PRODUCTS FROM THE PRICKLY PEAR CACTUS

Liliana Cracraft

In the last 10 years or so, the U.S. and México markets have exploded with a multitude of products made from the prickly pear cactus. The claims associated with these products, especially juices and capsules, include treatments for diabetes and hangovers, provide health for man (whatever that means), and a quick method for losing weight. Other products claim to be mosquito repellents. Some may be totally useless, but manufacturers may be taking advantage of consumers by offering a trendy product.

Remember to be cautious and always be skeptical, especially about “miracle” cures. To help consumers, the Federal Trade Commission has created a website where you can seek information <http://www.consumer.ftc.gov/topics/treatments-cures>.

Here are some pictures of these new products. You can be the judge.



Rhipsalis continued from p. 7

Bibliography

<https://rhipsalis.net/care/>

<http://www.llifl.com/Encyclopedia/CACTI/Family/Cactaceae/Rhipsalis/>

<http://rhipsalis.com/index.html>

Cactus Culture For Amateurs , W. Watson

<http://worldofsucculents.com/how-to-grow-and-care-for-rhipsalis/>

The Cactaceae, N. L. Britton and J. N. Rose, Volume IV, p. 219



Horticultural Molasses

On December 3rd the Houston Chronicle had a recipe for killing Nut Grass with horticultural molasses. I had never read about the stuff, but an Internet search revealed several articles touting its use in gardening. If interested try the site <http://www.rcwsproutings.com/?p=471>.

Apparently the only plant it kills is nut sedge but it is tough on bugs. I'll probably try it next year for the bugs.
Dick McEuen

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