JANUARY-FEBRUARY 2023

Kaktos Komments

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

Brisbane Botanic Gardens Mt Coot-tha by Karina Boese

Houston Cactus and Succulent Society Founded in 1963 Affiliated with the Cactus & Succulent Society of America

From the Editor

Karla Halpaap-Wood

Happy New Year! I hope for lot's of active participation by the membership to the KK.

Membership

Andrea Varesic

We as a club extend our deepest condolences to David Van Langen and his family on the loss of his dear wife Jennie.

On November 16th the HCSS met in person at the multipurpose center. We had eleven members in attendance and two guests. The door prize was provided by Karla Halpaap-Wood. It was an embroidered cactus keychain made of prickly pear cactus leather like product. Cactus of the month was Neoporteria villosa and it was presented by Echo Pang and her son. Succulent of the month, Dorstenia foetida, was presented by Karla Halpaap-Wood. Karla also gave this evening's presentation. "A Leather-Like Product Developed from the Prickly Pear Cactus". Wally Ward and Craig Hamilton gave this evening's show and tell.

We had a Christmas party December 4th at Riva's.



Calendar:	
January 11, 2023	7:00 pm Board Meeting via Zoom
January 25, 2023	7:00 pm Membership Meeting, Metropolitan Multi-Service Center Program: "Preparing Your Plants for the Show: Do's and Dont's" by Josie Watts
February 22, 2023	7:00 pm Membership Meeting, Metropolitan Multi-Service Center Instead of Program we have a "Valentine's White Elephant Unique Cactus & Succu- lent Exchange."
March 1, 2023	Deadline for submitting articles for the KK.
March 11, 2023	Field trip to Mercer Arboretum with tour of greenhouses by Jacob Martin



HCSS SPEAKERS BUREAU

Are you interested in becoming part of the HCCS Speaker's Bureau? On ocassion, we are contacted by members of gardening clubs and other plant societies around Houston and beyond, requesting a speaker. Most of these clubs meet during week days in the morning, but sometimes the presentations are scheduled on Saturdays. These clubs usually offer an honorarium. They can also provide a computer and an LCD projector.

If you are interested, please send an email message to opuntia77@yahoo.com with:

- 1. Your contact information
- 2. Availability (weekdays/weekends)
- 3. A list of the topics you could cover with a short description.

Thank you very much! Liliana R. Cracraft

Echo Pang

January Cactus of the Month

Name: Pelecyphora aselliformis

Synonum: Ariocarpus aselliformis; Mammillaria pectinifera Common names: Woodlouse cactus, Hatchet cactus, Peyotillo Family: Cactaceae

Genus: *Pelecyphora*

Origin and Habitat: *Pelecyphora aselliformis* is a cactus originated in San Luis Potosí, Mexico. The name comes from Greek "*pelekus*", which means hatchet. "*Phoros*" means bearing, referring to the shape of the cactus tubercles. The species name "*aselliformis*" describes the morphology of the





P. aselliformis in habitat by Steve Plath

cactus spines that look like Oniscus asellus, or woodlouse. The habitat of *P. aselliformis* is near the city of San Luis Potosí, located in central Mexico at over 1800 meters in altitude. The climate is arid subtropical, mitigated by altitude, with a very mild and dry winter from mid-November to early March and a warm summer with some rain from June to mid-October. The temperature typically varies from 41°F to 83°F and is rarely below 33°F or above 90°F. Being a very small and low growing cactus, P. *aselliformis* grows in grits under the shade of bushes so they get protection from midday sun. There is a rainless period of the year that lasts for 5 months (from November

to April). Summer to early autumn have the most precipitation and rain fall from July to September. The most rainfall is in July (of 3.7 inches in an average year). Winter to late spring is the dry season. The least precipitation and rainfall are both recorded in December (an average rainfall of 0.2 inches).

Description: *P. aselliformis* is a small cactus with a spherical to cylindrical stem. A flowering size plant is only 5-10 cm tall, 2-5 cm in diameter. A young plant is pencil-like, tall and thin. It can look quite different than an older plant when it starts to become more spherical and form a cluster. Its grayish-green color tubercles are flattened underneath the oval shape areoles (elongated and very close together). The spines resemble the most characteristic feature of this species- pectinated and look just like a woodlouse on top of each areoles!

Floral buds usually forms on the apex of the cactus in early spring, after the cactus has a rest during the dry winter. Flower season is from spring to mid autumn. Flowers only open on sunny days. Each flower is 2-3 cm in diameter; pink to violet in color with lighter outside petals with orange anthers and white stigmas.

NOTE: This species is congeneric to *Pelecyphora strobiliformis*, with almost identical floral, fruit, and seed morphology, as well as the internal structures. *P. strobiliformis* and *P. aselliformis* are the only two species comprise the genus of *Pelecyphora*.

Pelecyphora aselliformis is known to contain a trace amount of Mescalline, a psychoactive substance in the same way as *Lophophora williamsii*. That gives them the nickname "Peyotillo". The wild population of both species of *Pelecyphora* are classified as "being of Least Concern on the IUCN Red List.". (* The International Union for Conservation of Nature (IUCN) Red List of Threatened Species, also known as the IUCN Red List or Red Data Book, founded in 1964, is the world's most comprehensive inventory of the global conservation status of biological species.)

Cultivation and Propagation: *P. aselliformis* is a very slow growing species. It has a tuberous root system that requires excellent drainage from its soil. Grow it in direct morning sun or afternoon sun with mid-day shade for a compact spinal growth. Waterings should be sufficient in summer but restricted in winter, when night time temperatures remain below 10° C (50° F). In spring and fall, it needs very little watering in Houston. You can give this plant a light monthly watering to prevent shedding of the lower tubercles if your pot is small and the potting medium dries out too fast. Although it is hardy to -4° C for a short period, growing this cactus in a greenhouse or indoor during winter in Houston is the best. A good ventilation is crucial for the overall health of this cactus.



It can be reproduced both by seeds and cuttings. Plants in cultivation today is often grafted because it is slow to grow on its own roots. Grafting pups from older specimens is a much easier way of propagation than sowing.



P. aselliformis in cultivation in Houston at Echo's Cacti and Succulents Nursery

The rarity in cultivation, its characteristic tubercles and showy flowers plus the challenge of growing from seed successfully make the woodlouse cactus highly valuable and desirable by cactus collectors.

Reference

- 1. https://www.iucnredlist.org/species/152618/121601538
- 2. https://cactiguide.com/cactus/?genus=Pelecyphora&species=aselliformis
- 3. https://www.cactus-art.biz/schede/PELECYPHORA/Pelecyphora_aselliformis/Pelecyphora_aselliform-is/Pelecyphora_aselliformis.htm
- 4. https://weatherspark.com/y/5131/Average-Weather-in-San-Luis-Potos%C3%AD-Mexico-Year-Round
- 5. https://www.climatestotravel.com/climate/mexico/san-luis-potos%C3%AD

Photo credits

- 1. P. aselliformis photo in habitat by Steve Plath: https://www.facebook.com/photo.php?fbid=1022406834584 6630&set=a.10212630052336441&type=3&mibextid=cr9u03
- 2. Pelecyphora aselliformis at Echo's Cacti and Succulents Nursery: https://www.facebook.com/EchosCactiandSucculents
- Oniscus asellus and Seedlings at the base of an old plant in the growing pot: https://www.cactus-art.biz/ schede/PELECYPHORA/Pelecyphora_aselliformis/Pelecyphora_aselliformis/Pelecyphora_aselliformis. htm

Andrea Varesic

January Succulent of the Month

Alluaudia dumosa

Common name alluaudia, meaning "scrubby" Family Didiereaceae Genus Alluaudia

Distribution: Southern Madagascar

Habitat: Semi-arid scrubland and thorn forests above 900 m

Description: *A. Jumosa* is a slow growing succulent tree or a large shrub. Mature plants can reach 25' tall and 15' wide in the wild but only 10' by 4' in cultivation. The mostly leafless, cylindrical, elongated, grey-green stems are upright to arching and sparsely covered in small spines. Flowers are pink, white and yellow to chartreuse.

Diseases: It has no pests or disease of note.

Propagation: It is dioecious, meaning male and female flowers are on separate individuals. It is propagated by seeds or cuttings.

Medicinal uses: A decoction, a liquid resulting from extracting the es- http://www.kaktusar.cz/?attachment_ sence by boiling, of the stems is used to treat a toothache and can be used as a mouth disinfectant. Several flavonoids from the plant are antimicrobial in nature.



id=992

References:

https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=279836&isprofile=0&cv

http://www.plantoftheweek.org/week384.shtml



www.hcsstex.org

February Cactus of the Month

Opuntia Sunburst

Whether potted in a container garden or as part of the in-ground landscape, the Opuntia Starburst is a striking cactus.

Plant Family: Cactacea

Botanical Name: Opuntia cochenillifera 'Sunburst' variegated

Common Name: Cochineal nopal cactus

Habitat/Distribution: According to Tula.house and Planetdesert.com, the *Opuntia Sunburst Variegata* is not naturally occurring. Although it is native to Mexico, cultivation is widely distributed across the Americas and Asia.



Description: The *Opuntia Sunburst* cactus pictured is from my collection and is a standard representation of the type. It has branched pads and the variegation is a combination of vibrant yellow with deep rich green flecks, bursts, and waves. It is non-tox-

eom, the s native nd Asia. *urst* cacand is a a comep rich con-tox-

ic to humans and pets. While it is easier to handle because glochids are spaced out and the spines are clearly visible, caution should still be used. To keep the vibrant variegation, full sun for at least 5 hours is optimal. However, it will also do well with partial shade. Vibrant pink to red flowers will appear in late spring

to early summer.



Maintenance:

Sun - Full sun for a minimum of 5 hours.

Soil - While cactus potting soil can be purchased, a gritty well-draining mix is optimal. This can be done by adding up to 50% of other ingredients such as a mixture of perlite, chicken grit, pumice, sand, or volcanic rock.

Temperature – This cactus prefers warmer temperatures, above 70° F with winter temperatures between 40° F - 50° F.

www.hcsstex.org



Water - The *Opuntia Sunburst* cactus is drought tolerant. Wait until the soil is completely dry then fully saturate. During winter months, water once every 4 - 6 weeks. Note: When in doubt, it is better to under-water. Over watering can cause rot.

Cultivation: It can be easily propagated with branch cuttings. Select a pad that is healthy. Using a sharp and sterile blade, make a clean cut. Sprinkle the cut with your product of choice to prevent fungus and diseases. (I have used both sulfur and cinnamon on cactus cuttings). Both have worked well.) Allow the cut to dry, heal and callous. This usually takes a few days. Once the cut is healed/calloused, it can be planted. (While I have not tried it, a rooting hormone is optional)

My experience: I acquired my *Opuntia Sunburst* in late summer of 2022 and did not get an opportunity to see it bloom. However, the unique variegation still makes this one of my favorite cacti. It requires little to no maintenance. During the December 2022 freezing temperatures in the teens, it did just fine in a portable greenhouse that was heated intermittently throughout the day, with no heating throughout the night. It is still in the original purchase pot, and I have not decided if I am going to keep it in a pot by itself or mix it with other cacti and succulents. Either way, the unique beauty of the variegation makes it a star (or in this case, a sunburst!)



REFERENCES:

- 1. https://tula.house/blogs/tulas-plant-library/opuntia-cochenillifera-sunburst-variegated
- 2. https://planetdesert.com/products/opuntia-sunburst-variegata-cactus-cacti-unique-succulent-live-plant
- 3. https://succulentplantcare.com/how-to-easily-root-and-propagate-a-cactus/

February Succulent of the Month

Wally Ward

Haworthiopsis limifolia limifolia x Haworthia cooperi venusta GM292

SYNONYMS: the two plants that united to form this hybrid are named above. The Haworthiopsis has a history involving change in genus (from Haworthia to Haworthiopsis), and elimination of a subgeneric name (Hexangulares Uitewaal ex M.B. Bayer). *H. limifolia* under the generic name Haworthia has a lengthy list of synonyms, and the list can be found in Haworthia Revisited--*A Revision of the Genus*, published 1999). Per convention the mother plant, i.e.., the pollen recipient, is listed first (*H. limifolia limifolia*).

The pollen donor, *Haworthia cooperi venusta* GM292, is listed second. *Haworthia cooperi* has two synonyms, *H. arachnoidea* and *H. vittata*, but the subspecies *venusta* apparently does not. The two photos of *H. cooperi limifolia* are subject to copyright of Gerhard Marx and are used here by permission of Gerhard Marx. Readers who are generally interested in major taxonomic changes that



Haworthiopsis limifolia limifolia x Haworthia cooperi venusta GM292

have occurred to Haworthia and related general should see "All Change in Aloe and Haworthia" by Dr. Colin G. Walker, Cactus World vol. 31, no. 4, p. 297 (https://www.researchgate.net/publication/259581518_All_change_in_Alow_and Haworthia).





Father plant of Haworthiopsis limifolia limifolia x Haworthia cooperi venusta GM292, H. cooperi venusta. Photo credit: Gerhard Marx



Mother plant of Haworthiopsis limifolia limifolia x Haworthia cooperi venusta GM292, H. limifolia limifolia



Haworthiopsis limifolia limifolia x Haworthia cooperi venusta: structure of upper surface of the leaves



Haworthiopsis limifolia limifolia x Haworthia cooperi venusta: structure of lower leaf surface

COMMON NAMES

There appear to be no common names of the parent plants,

HABITAT/DISTRIBUTION

Using Bayer's distribution map in *Haworthia Revisited*, one can see that *H. limifolia limifolia* is widely distributed including localities in Swaziland, KwaZulu/Natal and Mpumalanga Provinces. *H. cooperi venusta* as of 1999 was known from only one small area near the Eastern Cape Province coast NE of Alexandria and near Grahamstown. The hybrid I created apparently has not been seen in nature.

DESCRIPTION

The hybrid very strongly resembles *Haworthiopsis limifolia limifolia* and would likely pass as a member of the Haworthiopsis genus but also differs in several respects from *H. limifolia limifolia*. The leaves are hard and dark with minimal ridges on upper and lower surfaces that form sublinear structures that on some leaves are interrupted and that bend at an angle, turning down toward each margin of the leaves,, but these are not very high above the surrounding leaf surfaces. In contrast *H. limifolia limifolia* has confluent transverse ridges. The hybrid leaves are extended and narrow with minimal curvature, in contrast with H. limifolia leaves, which are much wider especially near the base of the rosette and have conspicuous curvature.. Both hybrid and limifolia are stemless. H. limifolia limifolia offsets readily and abundantly, but my hybrid has never formed offsets. H. cooperi venusta does not even seem related to the hybrid, what with venusta's soft and hirsute leaves; see the two photos provided by permission of Gerhard Marx. I mentioned to an HCSS guest several years ago that my Haworthia hybrids all strongly resembled the plant that was the polen recipient, and he commented that this is the "mother effect." My hybrid has never bloomed, unlike the two parent plants. I may resort to tissue culture to multiply the number of hybrids from this cross. To see what kind of hybrid is produced by a reverse cross from H. limifolia onto H. cooperi venusta GM292, see the photograph labeled H. cooperi venusta x H. limifolia *limifolia*; that cross appears to have wiped out all the distinguishing characteristics of *H. limifolia limifolia*, so the mother effect appears to be very significant.



Haworthia cooperi venusta x H. limifolia

CULTIVATION/GROWTH

I have grown the parent plants away from strong sun but in bright, indirect light, using a well-drained soil mix consisting mostly of perlite. The *H. cooperi venusta* died a few years ago, but the *H. limifolia limifolia* has flourished. The hybrid also seems to thrive in a well-drained soil mix but out of strong sun and mostly in bright, indirect light. I started the *H. cooperi venusta* used as pollen donor for this hybrid from seed in 2005, having ordered the seeds from the Haworthia Society. The *H. limifolia limifolia* pollen recipient is an offset from a plant I obtained from the HCSS Exchange Table in the early 1990s. For this hybrid in 2005 I sowed the seed that produced this hybrid in 2012.

USES

The only use for the parent plants or hybrid is that *H. limifolia limifolia* is hawked as an herbal remedy in the area of eastern South Africa where it is abundant. It is offered as a treatment for fertility problems, sores, blood purification, cough, skin rashes, sunburn, burns generally, and gastrointestinal problems.

AVAILABILITY

The parent plants are sold via Internet, but the *H. cooperi venusta* is expensive. As far as I know, the hybrid made the subject of this report is not marketed.

REFERENCES

Bayer, Bruce, 1999. Haworthia Revisited -- A Revision of the Genus. Umdaus Press.

Scott, Charles L. 1985. The Genus Haworthia -- A Taxonomic Revision. Aloe Books.

Walker, Dr. Colin G. 2013. All Change in Aloe and Haworthia. Cactus World, Vol. 31, no. 4. p.297. https://www.researchgate.net/publication/259581518_All_change_in_Aloe_and_Haworthia

Dues for 2023 HCSS Membership are due on January 1st, please pay your dues on or before the January 25th meeting. Thank you for your continued membership. Looking forward to another great year with HCSS.

Cindy Gray Strickland

We like to thank David Klein from Klein Equities for the donation to HCSS.

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