Vol. 60
No. 2

March-April 2023

Kaktos Komments

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

Astrophytum asterias
by Karina Boese

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

Membership — Andrea Varesic

On January 25, 7:00 pm, the HCSS met at the Metropolitan Multi-Service Center. There were twenty members in attendance and four guests. Cactus of month was Pelecyphora aselliformis and it was presented by Echo Pang, assisted by her son. Succulent of month, Alluaudia dumosa, was presented by Andrea Varesic. Our program was presented by Josie Watts on preparing plants for judging at our Annual Show in September. She also discussed judging, clerking opportunities and encouraged member participation.

On February 22nd the HCSS met at the Metropolitan Multi-Service Center. There were twenty two members in attendance and four guests. We discussed our upcoming sale on Friday May 12 from 9-5 and on Saturday from 9-3 at the Center. There will also be a show and judging of our own plants, as a practice in showing and in clerking for the fall Show and Sale. The succulent of the month, Haworthiopsis limifolia limifolia x Haworthia cooperi venusta GM292, was presented by Wally Ward. We had our first annual cactus and succulent white elephant exchange.

We extend our condolences to the family of a long-time HCSS member Marie Tuma.

Marie was an involved HCSS member for over 20 years and held multiple positions within our club.

Calendar:

March 8 , 2023	7:00 pm Board Meeting via Zoom
March 11 , 2023	9:30 am, Field trip to Mercer, tour of the greenhouses
March 22, 2023	7:00 pm Membership Meeting, Metropolitan Multi-Service Center Program: "Cacti as Musical Instruments: An Overview and Performance of John Cage's Work *Child of Tree*" by Dr. Chaden Yafi
April 26, 2023	7:00 pm Membership Meeting, Metropolitan Multi-Service Center Program: "Importing Succulent Seeds into the USA per USDA Regulations titled SMALL LOTS OF SEED PROGRAM" by Wallace Ward
May 1, 2023	Deadline for submitting articles for the KK.

March Cactus of the Month

Joseph Rodd

Cereus cv. "Ming Thing"

Taxonomy: Typically sold as "*Cereus forbesii*," *Ming Thing* is a naturally-occurring monstrose cultivar whose true species name is disputed. The taxonomy here is muddled: there are three names, *C. validus, C. hankeanus, and C. forbesii*, that probably refer to the same species. Different scholars prefer different names, and official sources disagree about whether *forbesii* or *hankeanus* is the currently-accepted taxon.

Habitat: *"Ming Thing"* is an ornamental cultivar, so its natural habitat is collections and nurseries! *Cereus forbesii/hankeanus* is native to Argentina, Peru, and Paraguay, where it grows in the rain shadow along the eastern side of the Andes where so many wonderful cacti can be found. In habitat it's an extremely large, columnar species. Interestingly, in Paraguay the fruit of *cereus forbesii* is harvested and called "tuna," (the same name as Opuntia fruit), and – very confusingly – some authors even refer to it as a "prickly pear."

Description: *"Ming Thing"* displays a monstrose mutation that causes it to develop club-shaped growths and take on an abstract, sculptural form. Small areoles covered in white trichomes and short black spines dot the tops and sides of these strange protrusions. Fresh growth is particularly glaucous, which is probably what I like most about this cultivar. Nurseries say it grows up to a foot tall, but I suspect they can get larger with time. *Ming Thing* rarely flowers, but when it does, the flowers themselves can be bizarrely-shaped mutants. I am really hoping that mine will do this soon!

Cultivation: This cactus is extremely easy to grow and will tolerate a large variety of soil, moisture, nutrient, and light levels. *Cereus* often like more nutrients and moisture than many other cacti, so I plan to use a slightly-richer mix when I next repot it. Compared to many of my other plants, pests and fungi seem to leave it mostly alone. The only issue I've had is that caterpillars and slugs will munch on it if they get the chance.

Ming Thing can tolerate almost full shade – I'm sure it could be grown successfully indoors in a bright spot – but can also handle direct sun, especially if it isn't a summer afternoon. In my experience, it seems like adjusting the amount of light it receives gives you some control over its shape: if you want it to stay more compact and form tighter clusters with lots of wrinkles, grow it in more shade. If you want it to get taller more quickly, give it more sun.

The literature says it can't handle a freeze, but a couple years ago mine survived 28° F (-2° C) without damage, so I'd suggest that they can tolerate a light freeze if bone-dry. Fertilize lightly in spring. Water regularly in the growing season and sparingly in winter. Not a fast grower but a steady one, *Ming Thing* is one cactus that's pretty hard to mess up.

Availability: They're literally everywhere. *Ming Thing* is often propagated through cloning, and the big box suppliers like Altman are pumping these bad boys out. It's hard to walk into a home improvement center or nursery in the Houston area and not encounter one. Because plentiful specimens can be found for $5 at any Home Depot and grown to maturity with ease, I would not recommend spending more than that on this plant. Apparently the mutation is inherited, because it's also possible to order seeds online – you know, if you prefer to go the fun route.

References:

Anceschi, Giovanna and Magli, Alberto. *"Cereus forbesii." Cactus in Habitat*. http://www.cactusinhabitat.org/index.php?p=specie&id=196

"Can Ming Thing Have Flowers?" *Cactiguide Forum*. https://cactiguide.com/forum/viewtopic.php?t=18428

"*Cereus forbesii monstrose* 'Ming Thing'." *North Carolina State University Extension Plant Toolbox*. https://plants.ces.ncsu.edu/plants/cereus-forbesii-monstrose-ming-thing

Hunt, D. R. Cites *Cactaceae* Checklist, 3rd ed. Kew: Royal Botanic Gardens. 2016. https://www.kew.org/sites/default/files/2019-02/CITES%20Cactaceae%20Checklist%20Third%20Edition.pdf

Integrated Taxonomic Information System, https://www.itis.gov

International Plant Names Index, https://www.ipni.org/

Llifle Encyclopedia of Cacti, http://llifle.com/Encyclopedia/CACTI

López, J. et al., "Chaco Prickly Pear (*Cereus forbesii* Otto ex C.F. Först): An Ancient Source of Antioxidants and Dietary Fiber in the Diet of Indigenous Populations and Its Potential Application as an Ingredient in Derived Products," *Biology and Life Sciences Forum* 2022, 17, 21. https://doi.org/10.3390/blsf2022017021

March Succulent of the Month **Sara Ortiz**

Hoya Krimson Princess

Scientific name: Hoya carnosa 'Krimson Princess'

Common name: Waxflower, waxplant, waxvine

Origin: South East Asia

Hoyas grow wild across Australia, New Guinea, Polynesia, and the Philippines, and are native to Indonesia, China, India, Thailand, and several other south East Asian countries.

There are hundreds of species of Hoya. This is the variegated version of the Hoya Carnosa. It has waxy and thick leaves that resemble succulents. It is an epiphyte in the wild, and has a climbing habit.

This houseplant is sought-after for its bright pink stems, as well as the cream and pink variegation in the center of the leaves! It grows long vines, so you can let your Princess trail down from a hanging basket.

Light is the one of the most critical factors for your Hoya Krimson Princess. Lots of bright indirect light (at least 6 hours per day) plus a few hours of direct light is perfect. But don't go overboard, as your plant will pale and scorch if the light is too harsh.

This plant is notoriously fussy about having wet roots. To protect your plant from this issue, ensure you have a good-quality free-draining soil. I use succulent soil mixed with perlite and orchid bark to aerate the soil and allow lots of space for water (and roots) to make their own path. Water your plant when the top soil is dry. Keep in mind that wrinkled leaves, especially on leaves closest to the soil, signify that your plant is underwatered. At the same time, soft, yellow and wilting leaves typically mean your plant is overwatered.

Hoya Krimson Princess loves a humid environment. Between 70-80% humidity is ideal, encouraging vigorous growth. Ideally, keep your Hoya Krimson Princess between 61-95 degrees F (16-35 degrees C).

You will need to wait around 3-4 years for your plant to mature before it starts to bloom. Umbels of up to 30 small star-shaped, pink flowers with red centers bloom from peduncles (spurs). The nocturnal flowers produce a sticky nectar and a sweet scent that many indoor gardeners describe as vanilla custard, honey, or chocolate.

Hoya Krimson Princess is a slow grower. Indoors, it can grow up to 60 – 80 inches (1.5 – 2 meters). Though this is a far cry from the wild, it can grow to a length of 20 feet (6 meters)!

The usual pests that are especially attracted to the Princess are the sap-sucking variety, such as mealybugs, spider mites and scale.

The Hoya Krimson Princess is not toxic to pets and humans. Like all members of the Milkweed family, it does have a milky sap that may be irritating for sensitive skin.

Sources

D. (2022, May 10). Hoya Krimson Princess (Top #1 Care & PROPAGATION Tips!) - Gardening collective. Gardening Collective. https://www.gardeningcollective.com/caring-for-your-hoya-krimson-princess

J. (2020, September 20). How To Care For A Hoya Krimson Princess (Hoya Carnosa) - Indoor Home Garden. Indoor Home Garden. https://indoorhomegarden.com/hoya-krimson-princess/

Mesembs from Echo Pang's collection

Bergeranthus multiceps

Pleiospilos nelii

Glottiphyllum longum

Frithia pulchra

April Cactus of the Month

David Van Langen

Echinocereus papillosus

https://www.cactus-art.biz/schede/ECHINOCEREUS/Echinocereus_papillosus/Echinocereus_papillosus_angusticeps/Echinocereus_papillosus_V_angusticeps_SB1787_810.htm

Echinocereus papillosus is a small clumping cactus found in Northern Mexico and in a rather small area of South Texas. Its historical range in Texas is from Laredo thru Freer-- eastward to near Alice, then south thru Hebbronville to near Edinburg, then back toward the Rio Grande River. I would guess much of that habitat has been converted to agriculture. The soil there is mainly a limestone based sandy loam and the typical landscape is one of many thorny shrubs, mesquite and massive Opuntia. Echinocereus papillosus is most commonly found growing under all this mass of thorns and brush.

The green stems of E. papillosus are generally less that 2 inches across and mainly upright to 3-5 inches tall, although some will grow taller and become more prostrate. The main species of this plant usually has 3-12 stems. There is also one other variety found within its range - var. angusticeps-- which stays short but can have up to 50 stems. The inch long spines are fairly sparse and are multi colored with a dark base and lighter tip. It is the flowers that make this cactus so attractive !!! They are bright yellow with a dark red center-- much similar to many Opuntia flowers!!

Though hard to find in the wild and just as hard to find available in cultivation, grab one of these cute little cactus if you get a chance. They claim to be easy in culture, but I find they have an attraction for falling in love with MEALY BUGS !!! So if you do ever get to grow one-- keep a close eye for those critters !!

April Succulent of the Month

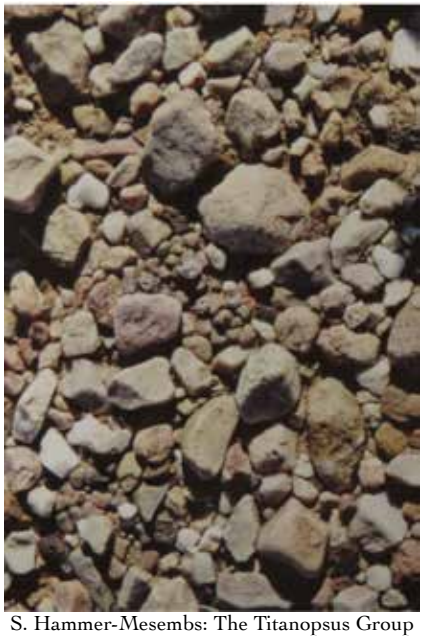
Echo Pang

Scientific name: **Aloinopsis schooneesii**

Family: Mesembryanthemaceae/Aizoaceae (Commonly Mesembs; fig-marigold; Midday flower; Ice plant; Vygie)

Habitat: Aloinopsis schooneesii is endemic to South Africa (in Eastern Cape). Its habitat climate varies from the west to the east, and from the north inland to the south coast. The west is more arid with sparse rain during winter or summer; frosty winters and hot summers. Further east, rainfall becomes more plentiful and humidity increases. The climate is subtropical along the coast with summer rainfall. The interior has cold winters with snowfalls occasionally occurring in the mountainous regions. Compare to Houston climate, it almost never has blasting hot summers or freezing cold winters. Weather data shows that the average high in summer is about 23-25 °C (74-77°F) ; average low in winter is about 6-7°C (44-46°F). Annual average precipitation is about 86.31 mm (3.4 inch). Similar to Houston, the humidity is quite high. The average relative humidity is 69.71% (in forms of fog or dew during the nights and early mornings).

Description: *Aloinopsis schooneesii* has stone-like, highly succulent leaves with textures forming rosettes on top of a tuberous root system. They camouflage to their various surroundings by mimicking the appearance of the stony soil in which they are found. You can expect to see brown species from brown ground, gray from gray ground; white or bluish leaves from quartz fields or limestone areas.


S. Hammer-Mesembs: The Titanopsus Group

They bloom in winter months on sunny days under direct sunlight. Flowers are daisy-like, usually yellow, measured around 1 inch in diameter (large and showy compared to their leaves). The flower pedals have a silky texture, decorated with red to orange stripes in the center of each pedal. Buds will not open if the weather is cloudy. The growing season is late winter into spring until it turns hot. In habitat, the plants will pull down into the ground to expose less of the leaves to the sun.

Cultivation: *Aloinopsis schooneesii* is a relatively easy to grow and quick to flower Mesembs. A deeper pot with rocky and sandy substrate to provide excellent drainage is recommended to accommodate the thick tuberous root. Although in nature the taproots are usually all hidden under ground, in cultivation, the plant can be gradually raised above the ground to reveal some of

Steven Hammer-Mesembs: The Titanopsus Group

the roots when it is potted up to create a "bonsai" look. They are winter growing, summer dormant in Houston. The thick leaves and taproots make this plant very drought tolerant, but they seem to be very forgiving about a bit of over or under watering, especially during their growing season. This plant will prefer full sun to part sun from fall to spring with adequate watering (allow potting media to dry out before you water again in Houston), but it should be protected from excessive heat and sun in summer dormancy with restricted watering. *A. schooneesii* is very cold resistant. It will not be harm by Houston winter temperatures with a rain cover. In summer, you need a shade cloth underneath the rain cover with excellent ventilation.

Mr. Steven Hammer, the author of the book "*Mesembs: The Titanopsis Group*", mentioned that "the more water it becomes accustomed to, the more water it craves, and vice versa. It's worth nothing that long-desiccated plants are highly prone to red spider attack, and plump ones are not."

Propagation: This plant can be propagated by division or from seeds. Mr. Steven Brack, the founder of Mesa Garden comments that "*A. schooneesii* is very easy to grow from seed and should be sown in the fall into early winter so they can grow well during the cool months. Germination is best when cool (like 55 to 68 degree F); heat discourages growth. Young seedlings should be protected from too much hot sun."

Collector's notes: "Aloinopsis schoonesii is not all that common, but a bit of a specialist plant…. Architecturally it is a real stunner. When the caudex shape of the raised roots is adequately in evidence this plant is incomparable."

References:

1. Steven A Hammer- Mesembs: The Titanopsis Group
2. Fred Dortort- The Timber Press Guide to Succulent Plants of the World. A Comprehensive Reference to More than 2000 Species. (Chapter 13. Dwarf Mesembryanthemums- Aloinopsis, Deilanthe, and Titanopsis)
3. Habitat weather data: https://tcktcktck.org/south-africa/eastern-cape
4. Köppen climate classification of South Africa: https://en.wikipedia.org/wiki/Climate_of_South_Africa#/media/File:Koppen-Geiger_Map_ZAF_present.svg
5. Location of the Eastern Cape in South Africa: https://en.wikipedia.org/wiki/Eastern_Cape#/media/File:Eastern_Cape_in_South_Africa.svg
6. https://www.cactus-art.biz/schede/ALOINOPSIS/Aloinopsis_schooneesii/Aloinopsis_shoonesii/Aloinopsis_schooneesii.htm

Photo credits:

1. Aloinopsis schooneesii in Echo's collection in late winter (mid February of 2023).
2. Steven A. Hammer- Mesembs: The Titanopsis Group. (Habitat pictures)
3. http://www.llifle.com/Encyclopedia/SUCCULENTS/Family/Aizoaceae/766/Aloinopsis_schooneesii

CSSA NEWS LILIANA CRACRAFT

The CSSA 39TH Biennial Convention will take place in beautiful downtown Colorado Springs, Colorado. The convention is scheduled from July 12 to July 16, 2023, with field trips on July 13th. This year we will also feature an optional field trip prior to the convention. There will be excellent speakers, plant and pottery vendors, live auction, and silent auction, local sales area, an opening reception, and awards banquet. Don't miss it!! If you are not a CSSA member, join now so you can attend. Non-CSSA members can only visit the vendor's area.

For more information about the convention visit: https://cssaconvention.com/cssa2023/index.html

Journals Back Issues and Books

The flagship CSSA publication, Cactus and Succulent Journal, has been the leading publication of its kind since 1929. It features popular and scientific articles about cacti and other succulent plants. Each quarterly volume features horticultural instruction, new plants, research and conservation reports, travelogues, biographical and historical material and book-reviews. To purchase back issues visit: https://cssa.myshopify.com/collections/journals

CSSA is building a library of specialty books.

Available right now: Aloes of the Cactus & Succulent Journal - 50 Years of Descriptions, Beginner's Guide to Haworthia, Agaves and other Succulent Monocots by Tom Glavich and Beginner's Guide to Adromischus, Aeonium, Dudleya, Euphorbia, Pelargonium and other Succulent Dicots by Tom Glavich and more to come soon! To purchase CSSA books visit: https://cssa.myshopify.com/collections/book

Membership

Become a CSSA Member for $50 per year! Membership Benefits include:

* Receiving the Cactus and Succulent Society Journal, published four times annually.
* Receiving the To The Point e-newsletter, published four times annually.
* Participating in the CSSA Biennial International Convention at a reduced price.
* Participating in CSSA's members-only Field Trips to native habitats of cacti and other succulents.
* Being able to purchase inexpensive seeds from the CSSA Seed Depot.
* Following CSSA's mission to support the cactus and succulent community through education, conservation, scientific research, and research grants.

From the KK archives **Liliana Cracraft**

With so many people now interested in growing cactus and succulents from seeds, I did search the KK archives to find some good and classic articles. Here are two of them; one published in 1964 by Charles Blanton, and another one written by Evelyn Crisp in 1975. When I first joined HCSS in 1990, Evelyn was still a member. She was a fine lady, and for several years she was the treasurer of the club. I intent to publish additional articles on the same topic. Enjoy! (Photo courtesy of Sergio Niebla)

TRY GROWING THEM FROM SEEDS by Charles Blanton

You're missing a lot of fun if you haven't tried to grow succulents from seeds! All it takes is a lot of patience, some containers that can be covered, the same kind of soil that you grow your plants in and the seeds. For most succulents, including cacti, a temperature of 75° - 80° is best for germination. So unless you can give them this heat in some other way, it is best to wait for warm weather. Semperviviums and some sedums need cold to germinate, harder for us to supply than good old heat.

So now, you are going to plant seeds! Use containers that you can cover and keep moist for about a year. A pot and a piece of glass are recommended by some books. Our most successful efforts have been in plastic refrigerator dishes, which become private little greenhouses. Choose a size that suits you and put a layer of small gravel and charcoal on the bottom for good drainage. (Charcoal seems indispensable in growing cacti and succulents, so if you haven't learned of its value, start using it now. It can be dusted on cuts to discourage rot and is also an aid in preventing acid soil and checks the growth of algae. I never did get Echeveria to germinate before I started using a thin layer of charcoal on top of the soil and I now consider 'damping off' a highly overrated problem).

Fill the pot to within an inch or so of the top. Moisten (not wet) the soil and press down firmly but don't pack. Very fine seed can be mixed with sand and charcoal and sprinkled on top for even distribution. Large cacti seed can be covered to their depth with sand-charcoal. Cover the pot and keep in a shaded place at 75°- 80° F. Most succulent seeds germinate in 7-14 days, though some cacti with hard seeds take much longer. After the appearance of the white roots, give them more light and air, but no direct sunlight.

Never let them be anything but moist at this stage, since they have not developed their capacity for storing water, which makes them unique as adult plants. They can be kept in the same soil a year or until they are big enough to transplant. Sound like a lot of trouble? Maybe so, but there's much pleasure along the way as you watch the seedlings that you helped create, grow and develop from two first leaves (cotyledons) into real homemade treasures. I've found it good therapy and have many plants that I would, otherwise not have. Try it yourself and have patience!

HOW I GROW SEEDS by Evelyn Crisp

MIXTURE: 1 part sand, 3 parts Carl Pool potting mixture and 1/2 teaspoon Benlate (fungicide) to one gallon of soil.

SEED PANS: Small sectional pans with holes in the bottom to draw up moisture, and trays to hold moisture.

GROWING CONDITIONS: The temperature should not go below 65-70°F, and can be above 90°F. The seeds should be kept moist but not wet. They must have free air circulation, and they should be shaded from direct daylight. I sow the seeds from April to July in clean pans and I only use boiled or distilled water.

PLANTING: I sow the seeds evenly. Then gently press seeds into the soil. Gently sprinkle the soil over large seeds. Set the seed pans in trays and pour water into the trays just until the top of the soil seems moist. Then I place the trays in a plastic bag and seal.

WAITING: Watch but do not disturb for 10-14 days. You will notice moisture appear in the closed plastic bag. The seeds will germinate. On the 14th day let air into the plastic bag, and do this each day increasing the time the bag is left open each day. On the 21st day, open both ends of the bag for free air circulation. Water only from below as needed.

WATCHING: If seeds appear to fall over, prop them with soil mixture, very carefully.

LABELING: I include the following data on my labels: name, mixture, date, color of flower, where seeds were obtained and any additional data I feel important.

PRECAUTIONS: The greatest danger to seedlings is damping off. Benlate and circulating air help to prevent this. Also, they need night warmth, they must not dry out, the tray should be level and they should only be watered from below for the first three months. After three months, they can be mist sprayed. If the seedlings become red or bronzed it is an indication that they need more protection from the light. If a seedling does rot or die it should be removed immediately

POTTING: There is no great hurry to repot your seedlings. Even if they are crowded they add support to each other. It is best to do it in the spring of the year. It is a good idea to water well the clay before you plan to pot the seedlings. Be sure to give them shade during their second year. When they are well rooted in their pots they can be spray misted.

HCSS Leadership and Contact Info

President
Andrea Varesic
avaresic@att.net

First Vice President
Wally Ward
biosparite@gmail.com

Second Vice President
Cindy Gray
grayco60@hotmail.com

Recording Secretary
Echo Pang
echo8891@gmail.com

Treasurer
Bruce Moffett
bmoffett@mindspring.com

KK editor and Webmaster
Karla Halpaap-Wood
khalpaap@me.com

KK publisher
Imtiaz Bangee
imbangee@yahoo.com

Membership
Lana Sands
Lana02660@gmail.com

Education
David Van Langen
dvl@pdq.net

Ways and Means
Rolando Ontiveros
rolandoontiveros@outlook.com

Publicity and CSSA affiliate
Liliana Cracraft
opuntia77@yahoo.com