Vol. 60
No. 5

September-October 2023

# Kaktos Komments

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

Echinocereus triglochidiatus forma 'White Sands'
by Echo Pang

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

## Membership — Lana Sands

On July 26, 2023, HCSS met at the Metropolitan Multi-Service Center. There were 24 members and 4 guests in attendance. Cactus of the month, Ferocactus gracilis, was presented by Elizabeth Jackson. The Club celebrated their 60th Anniversary, complete with a delicious potluck dinner with a huge cake and interesting slide show. There also were five very special door prizes.

On August 23, 2023, HCSS met at the Metropolitan Multi-Service Center. There were 27 members and 3 guests present. Echo Pang presented a delightful and informative program about her trip to central New Mexico. The presentations for Cactus of the Month: Echinocereus viridiflorus var. Davisil by Josie Watts and Succulent of the Month: Euphorbia nerifolia by Bruce Moffett were postponed to the next monthly meeting.

There were lots of free plants and books from Grant Wells' estate. Everybody got to pick several.

## Calendar:

| | |
|---|---|
| **September 13, 2023** | 7:00 pm Board Meeting via Zoom |
| **September 22-23, 2023** | Show and Sale, Metropolitan Multi-Service Center<br>Friday 9-5, Saturday 9-3pm |
| **September 27, 2023** | 7:00 pm Membership Meeting, Metropolitan Multi-Service Center<br>Program: "Xerophytic Bromeliads – Tough Plants You Might Learn to Love" by David Whipkey, Houston Bromeliad Society |
| **October 25, 2023** | 7:00 pm Membership Meeting, Metropolitan Multi-Service Center<br>Program: "Cacti of Big Bend National Park" by Joseph Rodd |
| **November 1, 2023** | Deadline for submitting articles for the KK. |

## September Cactus of the Month

**David Van Langen**

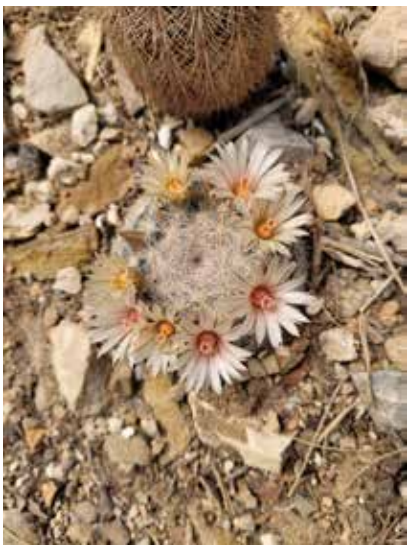
### Mammilloydia candida

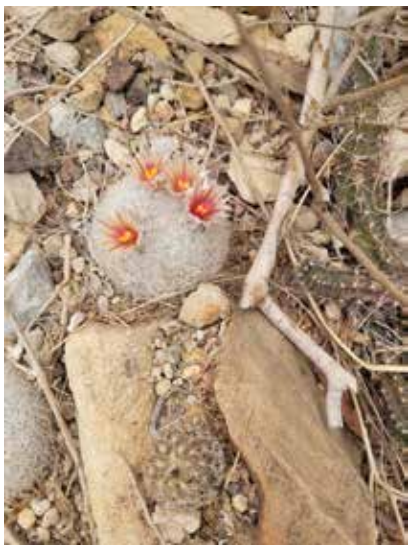
Mammilloydia (Mammillaria) candida is a small, round cactus, covered with dense spines that gives it the common name of snow ball cacus. It was formerly considered a Mammillaria but differences in seed structure and other things have led it to be in its own genera. This Mamm. has a wide range, covering most of North Eastern Mexico. It can be found in full sun but most seem to be found under desert scrub and grasses. Its habitat is rocky places such as limestone ridges and slopes in desert/desert scrub up to around 8,000 feet above sea level. It is found growing with very many cacti that can be found in West and South Texas.

It is said to reach a maximun height of nearly a foot and diameter of 6-8 inches. The green stems are almost completely covered by spines-- up to 120 per areaole. The spines are usually white to pinkish in color. Most plants are single stemmed and there is one variety that is known to form clusters. The flowers form in a typical Mammillaria fashion by forming a ring around the top half of the plant but well below the new growth. The flowers are less than an inch across and can be white, yellowish or pinkish. Even though the flowers are not very large-- the ring of flowers makes for a pretty display!!!

This cute little cactus is considered a great plant for beginners but still needs to be protected from long spells of rain as the dense covering of spines will hold moisture and promote rot. Give it the usual cactus soil that is fast draining with just a little organic matter. On a personal note--- I fell in love with these plants a couple of years ago and to this date---- knock on wood---- I have not lost a single one !!! Most are planted in the Fake Desert and a few are still in the tiny pots they were sold in. This brutal summer from hell has not claimed any of them yet !!!

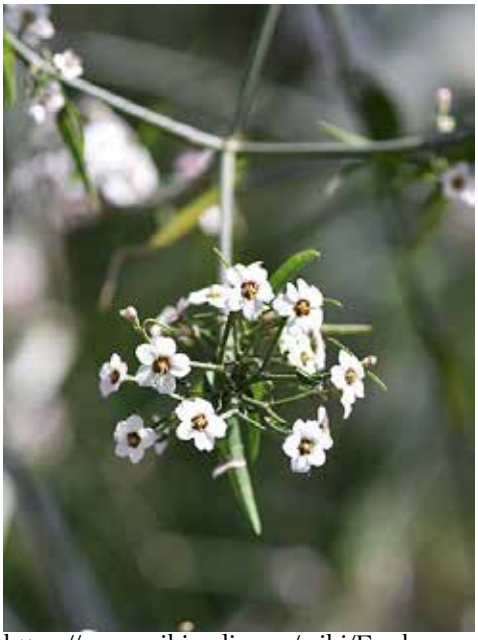
I highly recommend this cactus to everyone ! I have over a dozen but plan on buying more when the new shipments arrive next spring !!





## September Succulent of the Month

Andrea Varesic



https://en.m.wikipedia.org/wiki/Euphorbia_xanti

**Taxonomy**: **Euphorbia xanti**, known as the Baja spurge, is a species of flowering succulent in the spurge family Euphorbiaceae. It is also known as E. gymnoclada and Aklema xanti. is also commonly called White Spurge, Confetti Flower and in Spanish by the names cenefa, indita, liga and jumetón. . This plant was originally collected sometime between 1859-1861 by John Xantus de Vesey (1825-1894) a Hungarian zoologist and prominent 19th century specimen collector in North America.

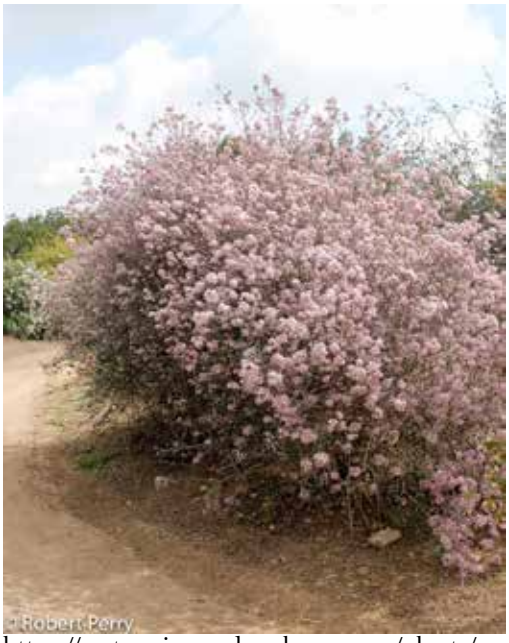
**Habitat**: It is native to Mexico, occurring in Baja California, Sonora, and Sinaloa. It is native to sea bluffs, dunes, rocky washes, and slopes.

**Description**: - An interesting fast growing openly-branched deciduous evergreen shrub to 3 to 6 feet tall and spreading by rhizomes to form extensive stands. From the woody base arise the pencil-thin gray-green stems bearing small ovate-lanceolate green leaves that come out after the plant begins to flower and often drop when temperatures rise or soils dry in summer. The white, often blushed-light-to-dark-pink, fragrant "flowers", appear in terminal clusters from mid-winter to late spring, sometimes to late summer - so it seems to flower nearly year-round. Flowers are followed by small gray rounded capsules.

**Cultivation**: Plant in full sun in a well-drained soil. It is drought tolerant but grows much faster and looks more lush with warm season irrigation. Hardy to 25° F with only light tip damage. It spreads by underground stems and can also self sow in the garden - this would be easier to control if one was not also hindered by the typical euphorbia toxic white sap that one wants to avoid. The best practice for this plant is to plant it on a slope or in the back of the garden where it has room to spread or withhold irrigation or keep it in a pot.

**Of interest** : It is one of the few fragrant Euphorbias.

I have two plants that are growing in pots. This summer I have had to water them every 2 to 3 days. My plants are two years old, but have never flowered. They both have many branches that are 4+ feet long.




https://waterwisegardenplanner.org/plants/euphorbia-xantii/

**References**:

Baja spurge waterwisegardenplanner.org

https://www.smgrowers.com/products/plants/plantdisplay.asp?plant_id=3622

https://en.m.wikipedia.org/wiki/Euphorbia_xanti

## October Cactus of the Month — Wallace Ward

### *Brasiliopuntia brasiliensis* (Willd) A. Berger

I. PRELIMINARY MATTERS

The Cactus of the Month was sold to me at a Lowes on Kirkwood Road in Houston. The plant had a label prepared by Cactus Collection.com stating that the name of the cactus is Argentine Opuntia/*Opuntia argentiniana*.

I checked this in my collection of books on cacti and succulents and found that there was a cactus named *Opuntia argentina* in a 1991 reference book titled *Cactus: Over 1200 Species Illustrated and Identified* by expert authors the late Clive Innes and the late Charles Glass. But further research in LLifle Encyclopedias of Living Forms: Cacti; the National Gardening Association Plants Database; and the IUCN [International Union for the Conservation of Nature] Red List demonstrated that my cactus has an accepted name as stated above: *Brasiliopuntia brasiliensis* (Willd) A. Berger.

I recommend the IUCN Red List publication (see References, below) to determine an accepted cactus name and a large volume of information on range, habitat, synonyms, threatened status if any, and other useful information.

## II. SYNONYMS; COMMON NAMES

*B. brasiliensis* has 25 synonyms beside *Opuntia argentiniana* Griseb. and *Opuntia brasiliensis*. The long list of synonyms can be found in the IUCN Red List article on this species. The National Gardening Association Plants Database lists one common name for this cactus: Brazilian Pricklypear.

## III. HABITAT; DISTRIBUTION

The best source of information on habitat and distribution of this cactus are found in the IUCN Red List article, including a map of South America with the distribution illustrated, and a detailed list of habitats, including some terminology apparently in Brazilian that I could not translate. Also a good source is Kew Plants of the World Online. In general, the distribution is northeast Argentina; Bolivia; north, NE, southern, SE, and west-central Brazil; Paraguay; Peru, and Uruguay (source: Kew Plants of the World Online). The species has been introduced into the USA (Florida).

The *CSSA Journal* of May 2009 published an article titled "Odd Opuntias" by Root Gorlick pointing out that *B. brasiliensis* grows at the periphery of dense forests grows at the periphery of dense forests in Brazil, starting with the fast-growing cylindrical trunk from which extrude flat pads and occasional cylindrical branches. The trunk bolts vertically to escape shade thrown by nearby plants. Gorlick opines that B. brasiliensis may be the tallest freestanding cactus species. The IUCN Red List and adds that this species can be found in the Atlantic forests of Brazil and supratidal rocky areas (inland cliffs, mountain peaks, and forest), and westward to the eastern drainage of the Andes.

## IV. DESCRIPTION

LLifle describes this cactus as a tree-like perennial with pads off a straight, green, round stem that can reach 9 meters (30 feet) high. The plant has mostly horizontal or declining branches bearing bright-green, spiny, flattened, oval pads. If the plant is kept in a pot, it likely will remain small and bushy. In spring-summer the plant bears pale-yellow flowers but only when the plant is two-to-three feet tall.

## V. CULTIVATION/GROWTH

This species is a spring/summer grower and can do well in full sun or partial sun. It should be cultivated in well-drained cactus mix and watered only when completely dry. In winter it should be brought inside to the brightest window available (east, southwest or western exposure). In deep tropical climates it can be grown as a hedge or tree, but the Consulta Plantas website warns that the minimum temperature should not go below 7 degrees C or 44 degrees F. If pot-grown it will remain fairly small.

## VI. USES

This plant is sold and used as medicine in its native habitat. I have no more details.

## VII. IUCN RED LIST STATUS

The IUCN reports this plant is of least concern despite destruction of some of its native habitat by agriculture and commercial use. The last Red List review dates to 2010, and additional study is needed according to IUCN.

## VIII. AVAILABILITY

Cactus King advertises *B. brasiliensis* for sale. Lowes offered the plant at one store on Kirkwood in Houston but had only one plant on display, which I bought. There are numerous sources for this plant online. Examples of sources: rootedinparadisess.com; toptropicals.com; plantdesert.com; and succulentcity.com; among others.

## IX. REFERENCES

Innes, Clive and Glass, Charles. Cacti. New York: Portland House, 1991

Kew Plants of the World Online: https://powo.science.kew.org/taxon/urn:/Isid:ipni.org:names:129102-1

LLifle Encyclopedia of Living Forms: http//:www.llifle.com/Encyclopedia/CACTI/Family/Cactaceae/6150/Brasiliopuntia_brasiliensis

IUCN Red List on *B. brasiliensis*: https://www.iuredlist.org/species/46517/121439029

National Gardening Association Plants Database: https://garden.org/plantsview/117836/Brazilian-Prickly-pear-brasiliopuntia-brasiliensis/

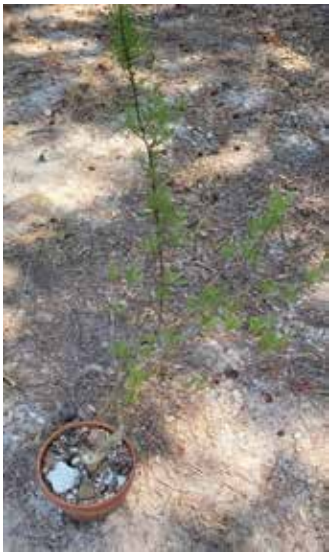
Root Gorlick: "Odd Opuntias" in Cactus and Succulent Journal 81(3) , 162 (1 May 2009): https://doi.org/10.2985/015.081.0312

Consulta Plantas: https://consultplantas.com/index.php/en/care-plants-from-a-to-c/1761-brasiliopuntia-brasiliensis-or-brazilian-prickley-pear-care-and-growing

## October Succulent of the Month

**DavidVanLangen**

## Bursera microphylla

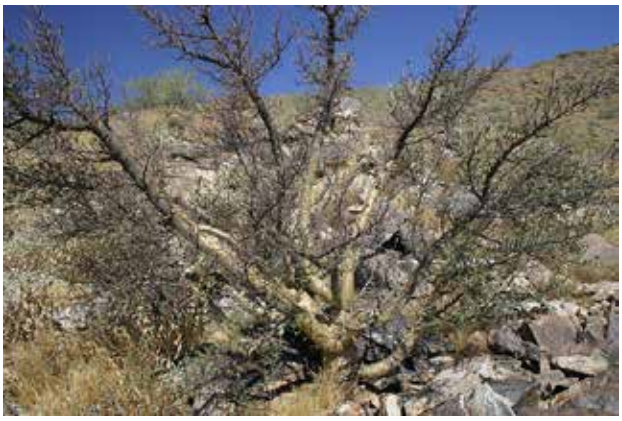


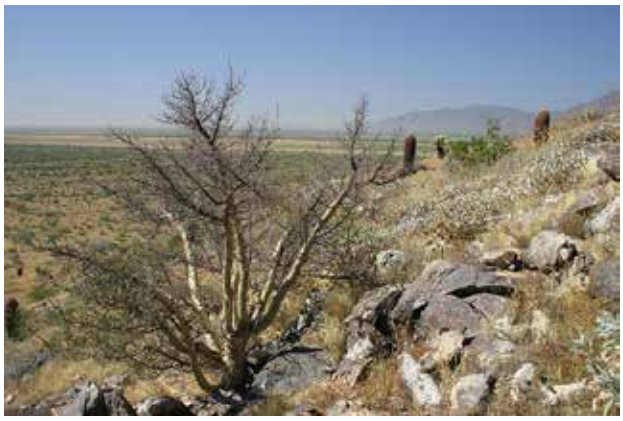
Bursera microphylla is a small tree / large shrub that grows mainly in the Sonoran Desert of Northwestern Mexico. Of the many species of Busera found in Mexico, B microphylla is the only one that grows in the United States. It can be found in the lower deserts of Southern California and Arizona. Its natural range is limited by freezing temperatures so it can only be seen in favorable microclimates in sheltered locations from Phoenix southward. The substrate of the rocky slopes it grows on is volcanic or granite based.

It has a swollen trunk with low twisted branches that are red tipped. As the name suggest-- it has tiny leaves that grow opposite of each other. It's commonly called Elephant Trees because of the caudiciform or fat stem at ground level. The bark is attractive as it will peel off in a coppery tone and the trunk can photosynthesize much like the Ocotillo does as the small leaves will fall of when in drought conditions.

This plant is in the frankincense family and has had many uses by native peoples. The sap can be burned as an incense and the medicinal use was said to treat several types of illness from headaches to arthritis to soft tissue pain.

In cultivation here in Houston, the Busera microphylla should always be considered a container plant. It is very tolerant of our hot summers and requires little care besides being protected from freezing temps. It is not often seen in the plant trade but is found now and then through localized special growers. I have had good luck with it but have failed-- so far-- when trying to get stem cuttings to root. Also-- I have seen this plant one time in habitat. It was about halfway up the south side of South Mountain in Phoenix and is shown in a couple of pics with this article.





## Estate of former member Grant Wells

As a society, we would like to thank Grant Wells, in memoriam, for his generous gift of cacti and succulents to our society. Grant was a long term member and a past president of our society. His daughter, Michelle, contacted our club and asked us to come and rescue his collection. On August 12th, 19th and 26th club members donated their time and their vehicles to complete this monumental task. Grant was an avid collector and propagator. It is Michelle's wish for the plants to go to members and for us to sell them, to benefit our club. At the August meeting, tables full of plants and books, from his collection, we're given away. At our September show we will be entering two Mammalarias, lovingly prepared for presentation by Josie, in memoriam of Grant. The rest of his collection will comprise our club table at the sale. Rest in cactus peace Grant, your collection lives.


August meeting giveaway

**Reprint with permission from the Michigan Cactus & Succulent Society**
**SPINAL COLUMN**
http://cactusandsucculentsociety.org/cssaarchives/NewsLetterArchives/news30.html

## Is It a Succulent? or Is It a Cactus?
## by Lou Kilbert
## Spinal Column, Michigan C&S

The word "succulent" is a general term that applies to many plants that are often totally unrelated except for in the far, far distant past! All cacti are more or less succulents - but most succulents are not cacti. In the beginner's mind, "cactus" is often applied to any spiny plant; although, why beginners don't then call roses "cacti" is beyond me! On the other hand, beginners often classify any fat plant without spines as a "succulent". This brief article attempts to clarify the issue for the beginning enthusiast.

The name "cactus" is applied to a plant family, thus the "cactus family", just like the lily family or the rhododendron family, etc. Cacti are plants that are exclusively American. Before the European expeditions to the "New World", there were no cacti in the "Old World". Today, because of mankind's intervention, cacti are found on all continents and almost every major island. Cacti are subdivided into three subfamilies: the Pereskiae, the Opuntiae and the Cereae. The Opuntiads comprise the largest subfamily of cacti. Most are easily recognized by the "Bunny Ears" growth habit that most assume. Opuntiads are found from the tip of South America on Tierra del Fuego to the Yukon Valley of North America. The two Michigan native cacti are both Opuntiads: the Michigan Prickly Pear (Opuntia compressa) found throughout the lower peninsula wherever the soil type and microclimate are favorable and a little known, very hardy and attractive species from the Porcupine Mountains of the upper peninsula (Opuntia fragilis). The pads on that cactus are more or less rounded to almost globular rather than having the more typical "mitten" shape. Opuntiads are identified by:1) The fact that, when in active growth, true leaves are present. These are the little green cylinders at the growing tip. They usually fall off as the pad matures. The pad (mitten) is actually a flattened stem and not a thickened leaf as beginners often assume.

2) The second characteristic that all Opuntiads have is the presence of "glochids" or microscopic, hooked spines. These are not the easily seen large spines that many Opuntiads also have but the furry looking buttons that stud the surface of the pad. These are the things that make many enthusiasts steer clear of this subfamily. These tiny glochids seem to jump off the plant and attack you when you least expect it. To remove them, try pressing tape against the skin and then rapidly pull the tape off. You can also apply white milk glue (Elmer's Glue), allow it to dry and pull it off along with many of the glochids. I have even used a razor to shave off the part that sticks out of the skin; you will still get a highly irritated reddened welt or ulcer from the embedded hooks.

3) "Areoles" are a characteristic of all true cacti found in all three subfamilies. These structures produce spines and flowers, and in Opuntiads, the areole also produces the glochids and true leaves.

The second largest subfamily of cacti, the Cereae, contains the plants that many of us grow to love. Here you will find such a great variation in size, shape and general appearance that beginners have difficulty finding the relationship between them. This subfamily contains columnar plants and globular plants. In general, the plants have ribs. Ribs allow a plant to expand to absorb large quantities of water; at that time, the ribs may seem

to disappear. When "starved" for water, the ribs become more prominent. Areoles are found along the outer edges of the ribs. Sometimes the ribs get further subdivided into "nipples", as in Mammillaria; each nipple is tipped with an areole.

Also included in this subfamily are the Jungle Cacti: Christmas, Thanksgiving, Easter, Rice and Orchid cacti. Except in the case of a few Rhipsalis (Rice Cacti), the relationship of these cacti to others in the group is not easy to see. If you ever grow one from seed and sometimes when they are grown under stress (low light and high humidity), tiny stems resembling miniature columnar cacti will be produced and then you may be able to see that these Jungle Cacti are closely allied with the others in the subfamily.

The third subfamily, Pereskiae, is not usually grown by hobbyists, but may be seen in botanical gardens. These are "primitive" members of the family that look like thorny roses that grew large enough to be called trees. The true leaves are large and waxy looking. The flowers look like single roses. However, areoles are present and produce the leaves, spines and flowers. And no, cacti did not originate in prehistory from the rose family. Pereskias are grown throughout the tropics as fruit trees. The fruit has the taste of a not-so-tart lemon.

Succulents are plants that take up or absorb water very quickly and store it in special water storage cells and organs. Succulents lose water very, very slowly 1) because they have reduced their surface area to a minimum, 2) because they cover their surface with waxy, water-resistant coatings and 3) because they greatly reduce the number of stoma or breathing pores to a minimum. Notice this descriptive definition doesn't say anything about spiny-ness because succulents may or may not have spiny appendages. Also notice that the definition is so general that it applies to many totally unrelated plants in many different plant families.

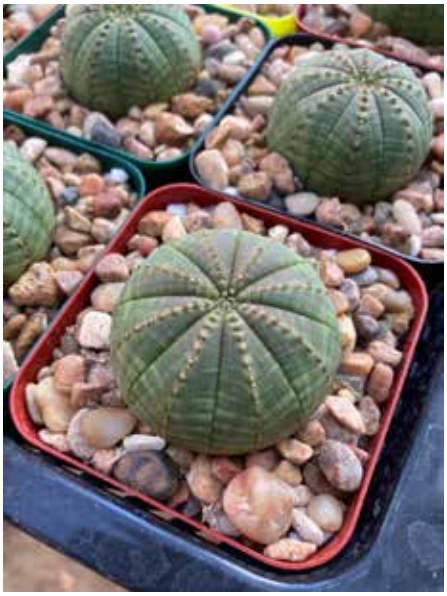
Cultivation of succulents is based on this definition. Succulents can take up too much water too quickly, mostly in cultivation. In nature, abundant water just is not available to the plants. After taking up all this excess water, because they lose water very, very slowly, they suffer and may even die! They can't get rid of excess water. They have reduced stoma, so water can't be excreted through respiration. They have thick coatings on their stems and leaves that won't allow excess water to escape. Thus, one waters carefully to prevent excess uptake. Christmas cactus suffer from "silver-skin disease"; this is caused by over-watering; the excess water gets trapped between the living green tissue and the thick outer skin. When the water is eventually eliminated, the skin appears silvery because now the layer between the skin and the living tissue is filled with air. The shape with the greatest volume and minimum surface area is a sphere. Many families have evolved species that are more or less spherical in shape as an ideal adaptation to life in dry climates. Look at pictures of Euphorbia obesa and Astrophytum asterias; two totally unrelated plants with an almost identical appearance!

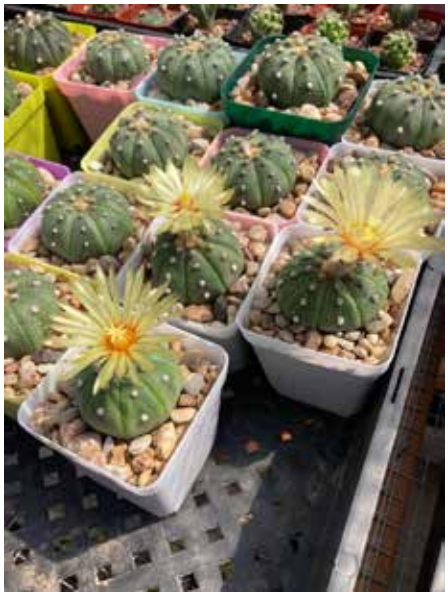
All cacti are succulents. Other succulents often resemble cacti as a result of parallel evolution. The family of plants most often mistaken for cacti are the Euphorbias of Africa. The Euphorbia family is distributed worldwide in contrast to the cacti that come exclusively from the Americas. Most of the Euphorbias outside Africa are shrubs and sub-shrubs and of little interest to collectors of succulents. If spines are present, Euphorbias are easy to distinguish from cacti. Euphorbia spines are branched, often with just two "horns", but sometimes having multiple branch points. Cactus spines are never branched; although, some are delicately feathered. Also unlike cacti, the twin horned spines of Euphorbias are mounted on a horny plate; this base plate often runs the full length of the rib, but may be just a little shield at the base of the spine.

Euphorbias are filled with a milky sap that runs like white blood from their wounds. The sap eventually clots

into a rubbery latex. Euphorbias were once investigated as a possible source of latex for the manufacture of "rubber", but that effort was abandoned. Caution! The milky sap of Euphorbias is very acidic and can burn the eyes, mouth and sensitive skin. Many people develop an allergic reaction to the latex as well. Some cacti, especially certain Mammillarias, also produce a milky latex; therefore, this is not a foolproof distinguishing characteristic.

Along with Euphorbias, the most often cultivated succulents come from the Lily and the Crassula or Jade Tree families. Even though Agaves and Haworthias look totally different from the vast majority of cactus, we still get people who ask, "Does that belong to the cactus family?" In the general public's mind "cactus" is indistinctly defined and the word "succulent" is almost never used, even though that is the simple, broadly encompassing term. I guess it's up to us to keep explaining to people the meaning of these words.





Similar appearance of Euphorbia obesa and Astrophytum asterias.
Photos by Echo Pang

**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