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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



Dorstenia foetida inflorescence
by Jared Petker



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

From the Editor**Karla Halpaap-Wood**

I would like to thank everybody who contributed to this edition of the KK, in particular Der-Shing Helmer from San Diego Cactus and Succulent Society for her extensive articles about *dorstenia* and her husband Jared Petker for the cover photo.

Membership**Sara Ortiz**

On July 23, 2025, thirty members and one guest attended a meeting at the Metropolitan Multiservice Center. We celebrated our HCSS potluck anniversary dinner. Kristi Schmidt introduced the succulent of the Month, Queen Victocria Agave, Royal Agave, or Queen, while John Weistroffer presented the Cactus of the month, *hypogaea* – “The Atacama Gremlin”.

We had such a great time chatting, enjoying all the yummy food everyone brought, and sharing stories with the longtime members who joined over 20 years ago and the newer folks. Swapping tips and ideas to keep growing our hobby is always a blast, and it's a perfect opportunity to make new friends, too!

With everyone in high spirits and celebrating, we seized the perfect moment to throw a surprise baby shower for the Pérez family, who are eagerly anticipating their first bundle of joy! What an exciting occasion to celebrate — congratulations to them!

On August 27th we had 24 members and one guest present. Josie Watts gave an introduction to judging show plants, and three of our club's judges, Josie, Karla and Karina, judged 6 show plants brought in by members. The discussion, that normally the judges do between themselves, was done in front of the membership for all to learn. We chose a winning cactus and a winning succulent, that will be entered for the Texas Grand Champion Cactus and Texas Grand Champion Succulent plants in October at TACSS seminar. Our winning plants were for cactus *Coryphantha elephantidens inermis* brought in by Naomi Pham and for succulent *Operculicarya decaryi* brought in by Jennifer Peskey.

Robert Perez presented the cactus of the month *Homalocephala texensis* cv. *Anayami*.

There were lots of door prizes and always new seeds in the seed bank.

Calendar:

September 10, 2025 7:00 pm Board Meeting via Zoom

September 24, 2025 7:00 pm Membership Meeting, Metropolitan Multi-Service Center
 Program: “Members Showcase”

October 18, 2025 TACSS seminar, Mercer Botanic Garden 9:am

October 19, 2025 TACSS, Mercer Botanic Garden Greenhouse Tour 10 am

October 22, 2025 7:00 pm Membership Meeting, Metropolitan Multi-Service Center
 Program: Presentation from TX department of Agriculture on the cactus moth, *Cactoblastis cactorum*

November 1, 2025 Deadline for submitting articles for the KK.

2025 TEXAS CACTUS & SUCCULENT SOCIETIES FALL SEMINAR



On Saturday, October 18, the Texas Cactus and Succulent Societies (TACSS) will be hosting the 2025 Fall Seminar from 9 am-5 pm at the Mercer Arboretum and Botanical Garden, located at 22306 Aldine Westfield Rd in Humble, TX 77338. Additionally, a private tour of their greenhouses will be offered on Sunday, October 19th from 10 am-12 noon.

The program includes many fascinating topics and experienced speakers. Irwing Lightstone, president of the North Texas Cactus and Succulent Society (NTCSS), and a member of CSSA board of directors will present "Intimacy, Exploration and Wonder... Celebrating 30+ Years of Plant Photography. Gierayl Clepper, owner of Madam Cacti, and a member of the Houston Cactus & Succulent Society (HCSS) will present "Astrophytum - Small Genus, Big in Cultivation." Philip Richards, owner of Thirst for Succulents on Etsy, and living in Louisiana, will talk about "Succulent Asclepiadaceae; Flies Love Them and So Will You." Barbara Schulze, a longtime member and past-president of the San Antonio Cactus & Xerophyte Society (SACXS) will present "The SACXS Legacy Project," and Steven Lovecky, one of the founders of the Central Texas Cactus & Succulent Society (CTCSS), and a past-president of TACSS, will talk about "Plants Rescue."

To register, please visit <https://app.jotform.com/252086839809168> Registration is free, but please consider donating a nice plant for the auction. For more information, send an e-mail message to: President@hcsstex.com.

Lunch on Saturday will be catered. Please bring a donation. Dinner is scheduled for 6 pm Saturday, at Willie's Grill and Icehouse, located at 6815 Grand Parkway, Spring, TX 77389. You'll pay for your dinner at the restaurant.

T-Shirts will be available for sale at a later time. More information coming up.

Liliana R. Cracraft

Special Events

July 20

We enjoyed brunch at Cochinita & co., located in East Downtown Houston. They offer made from scratch dishes, including dishes that feature nopales (nopales scramble pictured). If you have other suggestions or ideas for social outings, please reach out to Lauren Morris!



On August 23rd, HCSS had a social event at Total Wine for “Salud! An Introduction to Tequila & Mezcal”. 10 tequilas and mezcals were available to taste, along with two mixed drinks. There was an excellent presentation about the history and the fabrication of each bottle. Agave are truly amazing!



On August 31, a small group of the club's members was at Mercer Botanic Gardens for the first HCSS Conservation opportunity of the year.

The activity consisted in removing trifoliate orange trees, an invasive species, to help out with the local habitat preservation. As a result, the group removed 4 truckload full of thorny trunks and branches.



October Cactus of the Month

David Van Langen

Echinocereus dasyacanthus

Echinocereus dasyacanthus - AKA Texas Rainbow Cactus and more often than not there is a reason to call em Rainbow Cactus as they commonly have alternating bands of short white/ pink/ red/ yellowish spines covering the plant body. Most spines overlap each other to the point when the skin of the cactus can barely be seen. Once you go west of the Pecos River in Texas you are in *dasyacanthus* territory. The stem can average 3-4 inches in diameter and usually under a foot tall. While most remain a single stem, some can grow into clumps of a dozen offsets. While these beauties are most often found growing on limestone, they have also adapted well to igneous/ volcanic substrates as well as sandy Creosote Flats.



This neat cactus grows in most every part of Trans Pecos Texas and as far north as at least Roswell/ Artesia New Mexico and down into Mexico. It is usually found in the lower elevations of its natural range where other species of *Echinocereus* can be seen replacing them as elevations increase. The large flowers appear in March- May and come in many colors-- the most common being yellow, Flowers are typically 3 inches across and 3 inches tall. Certain locales can have a dominate color other than yellow !! The area around Sanderson has mainly white spines and purple is the dominate flower color.



One of my favorite locales is from El Paso up thru Orogrande and into the Alamogordo area. The plants found here are for the most part a large area of hybrids. Here *Echinocereus dasyacanthus* has crossbred with *Echinocereus coccineus* so long as to create a new species-- *Echinocereus roetteri*, and they constantly swap pollen which has resulted in flowers of almost any color imaginable. The same hybrid swarm situation also happens near Fort Stockton/ Pecos River area.

In my observation, these plants struggle to make flowers here in the Houston area. I can get good growth but they just don't make many, if any, flower buds come springtime. Its very possible the humidity is one factor and the lack of the needed chilling hours in winter and warm nights probably has a lot to do with it ! While not easy

to find in local box store cactus racks, there are specialty nurserys that will offer them from time to time. If you get a change, nab a couple when available. They are a nice medium size cactus and make a colorful addition to a collection even when not in flower.

They NEED plenty of sunshine and very little water so please make room for the beauties if you can meet their demands!!! Cheers !!!



October Succulent of the Month

Grealing Daniel

WELWITSCHIA MIRABILIS

Welwitschia mirabilis

“The living fossil”

Namibian desert, in Angola and Namibia

Only two leaves originating from a caudex

Not common in cultivation, Slow to fast growth

In a lost corridor lies an alien landscape, and a plant forgotten by time. *Welwitschia mirabilis* is the last remaining vestige of the *Welwitschiaceae* family, a genetic lineage that spans back to the Early Cretaceous period, 110-120 million years ago.

Welwitschia mirabilis itself dates back to the Miocene–Pliocene period, about 3 million years ago, in what is the modern-day Namibian desert, the oldest desert on the planet.

Welwitschia mirabilis looks out of place in modern biology, two waxy leaves protruding out of a gnarled woody mass. But this is a strategic adaptation; the Namibian desert happens to be a coastal desert, and similar to some *Copiapoas*, *Welwitschias* have adapted to survive off the condensation when the coastal fog rolls in. It's thought that the leaves act like condensation traps, that collect and direct the condensation to the plant's woody caudex. But they are also believed to have a deep root system that might be able to reach hidden water tables under-



neath the dry desert surface.

Welwitschias are also ancient relatives to conifers; among being evergreens, they reproduce dioeciously with male and female cones, similar to one of their closest relatives, pine trees. It's been a topic of debate over the years, but it's believed that they are insect-pollinated, via ants, bees, or wasps.

Though even when they are successful in their attempts to reproduce and make seed, it's often a fruitless endeavor...

In order for its seeds to germinate, conditions have to be just right, which is a very rare occurrence. Its gymnosperm seeds need ample amounts of water to germinate, as implied in the name; these seeds are basically soft-shelled and might be able to last a year or two hidden in the desert floor, but almost all go to waste waiting on rains that might only occur every 20 years.

This is why you will find pockets of *Welwitschia* out in habitats that look very similar in age. The youngest might be 40-50 years old, most are hundreds of years old, and some date back to around 1,500-2,000 years old, which means some that are alive today were living during the Roman Empire, all while growing in one of the harshest deserts on the planet.



Now, if you ever get your hands on one, it's best to put it in a well-draining mix, but never let it dry out. Give it plenty of light, heat, and water, but maintain a close inspection of stress discoloration and the rate at which the leaf tips die back. That will tell you all you need to know.

Once they get past the age of one and are in a good pot and mix, they are fairly easy plants to maintain.

Sowing from seed is more complicated though. Given that you find good seed that didn't come out of habitat, the prevalence of fungal problems is very common.

It's a safe bet to use fungicide regularly until they are maybe 6 months old, but even that does not guarantee success. You will only learn how to sow them from seed in your location by trial and error. It seems like there are different rules based off locality. What works in Thailand will not work in Houston.

But the same basic sowing principle applies to *Welwitschia*. Sow about 1cm deep, keep moist and warm, and in 1-2 weeks you'll either have a seedling or you won't.

But it will emerge with two adolescent cotyledons and then develop its true leaves.

I prefer to sow them in tall pots, like tree pots, but it's common to sow them in normal pots, and they seem to do just fine.

They also respond well to regular applications of fertilizer. They really aren't picky, but I don't go overboard.

There's more to the story of *Welwitschia mirabilis*, but this quick rundown is really all you need to know in order to get by.

For those that were interested in *Welwitschia* but worried you might kill it, let this information be the impetus you needed to snag one or even try your hand at sowing and keep *Welwitschia mirabilis* alive for more millennia to come.



Succulent *Dorstenia*

While browsing in San Diego Cactus and Succulent Society's newsletter I found some very interesting articles about *Dorstenia*. It seems to grow as well in Houston as in San Diego.

This first article is from "Espinass Y Flores", Vol. 56, No. 8 in shortened form in order not to repeat what is said in the second newer article, but I think it's very worthwhile to read both.

Succulent *Dorstenia*

by Der-Shing Helmer

Have you ever eaten a fig? If so, you've already met the family *Moraceae*. Another genus in that family is *Dorstenia*, one of my very favorite plants, and the only genus in *Moraceae* to exhibit succulence. You've likely noticed a member of *Dorstenia* at a club show or sale-- they make for interesting specimens, often exhibiting stark colors on, textured leaves, and explosive hand-like "flowers" of various shapes and colors. While doing research for this article I was amazed to find so little non-academic material available about this remarkable genus, so the purpose of this write-up will be to introduce you to some common features and interesting facts about *Dorstenia*, some info about its culture, as well as to take a closer look at some thrilling *Dorstenia* species.

A LARGE AND WIDESPREAD GENUS

Dorstenia are found in equal numbers in the Afrotropics and Neotropics, as well as in Sri Lanka. There are over 100 accepted species of *Dorstenia*, with new discoveries being made every year. All *Dorstenia* have a milky latex (which often smells terrible), minute flowers, and a unique form of inflorescence. Additionally, *Dorstenia* can either self-pollinate or require a genetically distinct partner, and while most are monoecious, a few species have independently evolved dioeciousness as well. At present, the fossil record of *Dorstenia* is incomplete, so it's unclear if *Dorstenia* crossed from Africa over the land bridge to the Americas, or if the genus traveled directly from Africa to South America during a geologic era when the continents were physically closer together. Generally speaking though, the majority of succulent *Dorstenia* are found in the Middle East and Africa.

A HANDY PROGENITOR



D. foetida hypanthodium



Common fig, Wikipedia

The jazzy hand-like "flowers" of *Dorstenia* are one of its most charming features, and they are oddly enough, closely related to the "fruit" we commonly see in stores. Pictured on the left is a "fruit", as well as a *Dorstenia* "flower" (this one is *D. foetida*). I put those particular words in quotes because neither is a true fruit nor flower, but an inflorescence (hypanthodium), known as a synconium in figs and a pseudanthium in *Dorstenia*. Both hypanthodia are actually made up of many tiny flowers, whose tiny stamen you can often see if you look at a *Dorstenia* pseudanthium up close. In a fig, the receptacle is completely folded into itself to create the "fruit" we are so familiar with. In *Dorstenia*, the receptacle is open like a hand. So you can think of a *Dorstenia*

pseudanthium to be similar to a fig which has been turned in-side out for your viewing enjoyment. *Dorstenia* pseudanthium can take a huge range of shapes, from planar, convex, concave, round, oval, square, lobed, twig, star, boot, or tongue-shaped, and with colors varying from green to yellowish and reddish to violet and brown. Now that we've gotten that out of the way, let's do a little tour of some of the *Dorstenia* you may find in cultivation.

PACHYCAUL DORSTENIA

Many of the popular *Dorstenia* are pachycaulous, or “thick stemmed” succulent plants.

Dorstenia gigas is, as the name suggests, the largest *Dorstenia* species. Found on the Yemeni island of Socotra, wild *D. gigas* cling to rock faces and collect water with their massive bodies. Young *D. gigas* have greenish skin and beautifully prehistoric-looking dark green leaves, and mature into sculptural plants with pocked white skin. *D. gigas* are easily propagated from branch cuttings, and also easily grown from seed... if you can find it! While monoecious, *D. gigas* requires two genetically distinct individuals to produce viable seed, and plants can take up to 10 years to flower (given proper care and culture). Since most *D. gigas* available from growers comes from rooted cuttings that have been propagated from the same batch of samples collected in the 70's, there is very little genetic variability in these plants. So while you might be lucky enough to see one flower, it's not as likely that you'll be able to collect viable seed, except from a few specialty sources overseas.

D. gigas gets a bad rap at times, perhaps due to its cost or perceived rarity, but is actually very easy to care for, and a forgiving plant to own. It takes a lot of water in the summer/ growing months, and in our area it some times skips dormancy in the winter. While they can be grown in full sun, I find they stay happiest and leaf the best in bright shaded areas, and can even be grown directly in the ground with the right type of soil and some frost protection. Others who cultivate this plant also experiment with fans, mist, and other methods to simulate the unique island climate of Socotra. Definitely a fun and rewarding plant to keep.



Dorstenia gigas

Dorstenia gypsophila is a rare, extremely beautiful *Dorstenia* which I have never seen in person (so no photo from me), but would like to one day. Coming from only one gypsum-rich small area of Somalia, they are quite beautiful squat white plants with diminutive leaves and spindly red hypanthia. If you find one, you've lucked out!

Dorstenia foetida: See description in next, newer article.

GEOPHYTIC DORSTENIA

Geophytic succulents are those where the caudex is located underground. In cultivation, the warty tuber is often lifted to show off its interesting form.

Dorstenia barnimiana, one of my very favorite *Dorstenia*, is a diminutive plant found throughout central and eastern Africa, and comes in a variety of forms. The caudex can range from tan to red- brown, the leaves from circular to deeply lobed, and the hypanthodia from a cute “turtle” shape to an elongated spidery form.

Based on how often I've seen it offered in cultivation, *D. barnimiana* seems to not be a plant that is enjoyed widely in the US, but is apparently favored and a bit easier to find through Eastern Europe and Japan.

I've read that they have a habit of going dormant at the drop of a hat, and honestly that seems to be the case.



Dorstenia barnimiana (Mwarandinda locality)



Chunky, affable *Dorstenia barnimiana* var *telekii* hypanthodia

But once firmly established (or grown from seed) in an amenable environment, the plant seems to really thrive and enjoy much more water than you would expect. Most of the *D. barnimiana* available in cultivation come from Kenyan and Tanzanian localities, which generally don't get temperatures above 85°F... seems like it would be a fairly easy plant for many of us to cultivate here in San Diego too.

Dorstenia ellenbeckiana is a rare plant from Somalia, Kenya and Ethiopia. It has a reddish caudex, small leaves, and produces a (semi- threatening) large red-brown hypanthodium. Yet another plant that is seldom found outside of university collections. My plant recently came out of dormancy, and while *D. ellenbeckiana* requires a genetically distinct partner to produce viable seeds, I am still excitedly waiting for it to flower!



Dorstenia ellenbeckiana, with nice dark leaves developing after coming out of dormancy

OTHER CAUDICIFORM DORSTENIA

There are many other interesting forms of succulent *Dorstenia* available in cultivation! Some of the neat species you might find are *D. lavranii*, a dioecious plant that forms a delightful forest-like thicket in maturity, *D. borwoodii*, which produces tall flowers out of the crown of the plant and looks very much like a miniature palm-tree, *D. cuspidata* var. *longipedunculata*, a plant with massive hypanthodium and a neat warty caudex, and many more.

GROWING DORSTENIA FROM SEED

Dorstenia are sometimes (unfairly, in my opinion) considered weeds because they seed so readily. They are also often accused of seeding only when you don't want them, and being difficult to grow intentionally. I've actually found all *Dorstenia* I've tried (so far) to be easy to seed-- one just needs to provide a ziploc bag or enclosed tray or other humid environment, and the right growing medium. Most seeds I've attempted have grown just fine in normal "seedling soil" (sifted 1/16th pumice and coco coir) with some sand added at the top for abrasiveness.

One challenge to grow seed is actually catching the darned things, as they tend to shoot here and yon without much notice. You'll see them beginning to emerge from the hypanthodium, then an hour later you come back to a hole where your fresh seed used to be. My solution is just to put a little mesh sock (like the disposable kind used at shoe stores) over the plant: this allows it to breathe, is reusable, and most importantly is very handy at catching many projectiles.

Why grow *Dorstenia* from seed? Aside from the enjoyment, it's much easier to get a plant with a fat caudex if you grow by seed. Compare (pictures on right) my 2- year old seed-grown *Dorstenia* gigas, with a cutting procured around the same time 2 years ago. Both receive the same care, but the seed-grown gigas has a huge caudex which the rooted cutting (while healthy), will likely never be able to achieve.

In any case, I hope you liked reading my little write- up about *Dorstenia*! I have been obsessed with the genus for 2 years now, and am always excited to chat or talk about your *Dorstenia* collection. Feel free to contact me if you'd like to talk more about this outstanding succulent!

DER-SHING HELMER

All pictures in this article, if not labeled otherwise, are by the author.



Dorstenia gigas: from cutting (above) and from seed (below)

Sources:

- Araújo, L.M. et al. 2017. From anthesis to diaspore dispersal: reproductive mechanisms of rare herbaceous Moraceae species endemic to Brazil. *Darwiniana, nueva serie* 5: 83-92.
- Berg, C.C. & Hijman, M.E.E. (1989). *Flora of Tropical East Africa, Moraceae*: 1-95.
- Bihrmann, E.. Bihrmann 's Caudex. www.bihrmann.com/caudiciforms/. Accessed June 2021.
- Rowley, G. D. *Caudiciform and Pachycaul Succulents*. Strawberry Press, 1987
- Thorogood, C., Dalton, N., Irvine, A., Hiscock, (2018). The reproductive biology of two poorly known relatives of the fig (*Ficus*) and insights into the evolution of the fig syconium. *Nordic Journal of Botany*. 36. 10.1111/njb.01832.

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ARTICLE BY DER-SHING HELMER

Dorstenia sp. 'Lav 10341'

Appreciating *Dorstenia foetida*

Dorstenia foetida...if you haven't previously made its acquaintance, this is a small, succulent-stemmed *Dorstenia* with a pungent white sap and happily waving hand-like inflorescences. And if you do own one, you probably own a dozen. One of the easiest plants to propagate from seed, *Dorstenia foetida* is known for donating a copious number of volunteers to any pots that might be in the vicinity via its dehiscent "popping" seed dispersal mechanism.

Given its propensity to show up uninvited, some may find this plant to be an annoyance. So why is this plant worth appreciating? Personally, I think this humble member of the *Dorstenia* family brings a lot to the table due to its high variability and its ability to look incredible after just a few years of care. It's a fun and rewarding plant to grow, and I hope this article will help you develop an appreciation for the many beautiful forms this plant has to offer.

First, a bit of history

Dorstenia foetida was first noted by a European in 1762 by the young explorer and philosopher Pehr Forsskål of what is now Finland who joined an expedition to "Arabia Felix", now known as Yemen. During this trip, he collected an inflorescence from the locally-named kosar plant, which he named "*Kosaria foetida*". This student of Linnaeus died of malaria during the trip, in 1763, but his notes remained. In 1776, Jean-Baptiste Lamarck reidentified the plant Forsskål had described as "*Dorstenia radiata*", and in 1896, Georg August Schweinfurth described the plant formally as "*Dorstenia obovata*". In the next few decades, *Dorstenia foetida* was renamed, divided, and revised by several players, but in modern times, botanist Frank Horwood reexamined plants from different areas such as Yemen, Somalia, and Kenya, and determined that these plants actually showed one large polymorphic population with a

massive range, and botanist Ib Friis further proposed that *Dorstenia foetida* be split into several subspecies based on stem branching and leaf shape, but not environmentally variable characteristics like stipule presence or leaf margins.

In the wild

Dorstenia foetida's native range extends from the Middle Eastern countries of Saudi Arabia, Oman, and Yemen down through east Africa, reaching as far south as Tanzania. They can be found in a range of environments, from limestone to sand to clay-heavy black cotton soil. A superficially similar species, *Euphorbia hadramautica*, has a similar range of Oman, Yemen, and down through Ethiopia. Comparing the two, one can't help but wonder if *D. foetida* has evolved to utilize Batesian mimicry so that it might be confused with the far more toxic *E. hadramautica*.

Appreciators such as ourselves are able to see through the mimicry and identify *D. foetida* based on its most common characteristics: it is a succulent plant with a swollen base and stem, with pronounced markings of leaf and stipule scars. Leaves are usually located at the top of the stem and are lance-like to rounded oval in shape. Stipules are usually only 1-2mm long, and tend to wither and dry and fall off. *Dorstenia foetida* inflorescences hang from peduncles of variable length, with numerous male and female flowers present on each flower. Seeds are pale brown and tuberculate, about 1mm long. More variable characteristics include the presence of stipules, the presence of leaf margin crisping, and the shape of leaf scars. M. Strlič supposes that asexual apomixis combined with sexual reproduction could be a factor in the wide diversity of features in *Dorstenia foetida*.



Dorstenia foetida seed

Jared Petker

Growing *D. foetida*

There may not be an easier plant to grow than *Dorstenia foetida*. You'll find that they can thrive anywhere and everywhere! My tried-and-true *Dorstenia* soil mix is generally a 60/40 split of inorganic to organic with a diversity of grain sizes to aid root growth, prevent rot, and keep the soil from clumping, but that sort of effort is rarely needed for plants in the *D. foetida* group. You can grow them in a succulent-appropriate soil, or simply toss plants or seeds into any soil or space you have available. In the wild these plants can grow slowly and with a compact shape in arid conditions, but they're happy to be pampered as well...I have friends in tropical environments like Indonesia who grow them outdoors where they get rained on constantly, and grow huge with lush foliage.

D. foetida appreciates warm temperatures, but like most *Dorstenia*, will not thrive in extended temps above 90F, and you will risk rot when you reach frost temps as well. They can grow in a variety of light conditions, but will do best in bright indirect light or gentle sun. The scorching direct light of summer (or even winter) can burn plants that aren't acclimated for it, but too little light can cause etiolation and huge stretched out leaves. Indirect light will lead to plants with well-spaced leaf scars and tight leaves.



Dorstenia foetida showing tightly-spaced, spiral-arranged leaf scars — aka, those white circles

Water-wise, *D. foetida* enjoy as much as you can give them in the active growing season. I have rarely lost a plant to rot unless it was already ill, but I also have that well-draining 60/40 mix I mentioned; you will not want to keep your plants sodden or soggy, or you increase the risk of caudex rot. In winter, you can reduce the amount of water you give them, but generally *Dorstenia* do not like their roots to fully dry out. I give mine a little bit of wetness every few days to remind them to stay alive. If you live in an area where it gets cold enough to induce true dormancy, you'd probably want to play it safer and underwater, but in our area of SD County, temps aren't conducive to making *D. foetida* go fully asleep.



Clearly long, thin, and lanceolate leaves of a specimen sold as "*Dorstenia lancifolia*"

D. foetida is also resistant to many pests, but there are a few that can make a home if you're not careful. Mealybugs can at times attack the growth point of plants. Your tell will be leaf loss at the apical meristem; check for signs of insect activity if you see this, and treat accordingly with an application of isopropyl alcohol. If being kept in a humid environment, spider mites can also become a problem. In that case, you'll note the typical chlorotic yellow-spotted leaves. I find that a spritz of insecticidal soap takes care of those problems easily. Last, I have rarely encountered scale on *D. foetida*, but it can happen. It is very difficult to spot on older plants that develop a white stem, as they can really blend in. If you notice any unexplained flaking of the epidermis, give your plants a check; the above-mentioned treatments both work on scale, though you'll have to go through and pick them off later as well.

Formal *D. foetidas*

In 1983, Ib Friis proposed the following subspecies and varieties of *Dorstenia foetida*.

- *Dorstenia foetida* sp. *lancifolia* stands out for its lanceolate shaped leaves, and a leaf stem that is shorter than the length of the leaf itself.
- *D. foetida* sp. *foetida* var. *foetida* stands out for its stems which branch from a tuberous basal part.
- *D. foetida* sp. *foetida* var. *obovata* can be differentiated from var *foetida* due to unbranched stems and an only slightly swollen base.

So, what do I have?

In reality, *Dorstenia foetida* isn't always easily identifiable down to the subspecies or variety level mentioned in the section above. Over the years, different forms of *D. foetida* have intermingled genetically with other *D. foetida*, or sometimes other related species of *Dorstenia*, to form beautiful (but confusing) hybrids. Additionally, *D. foetida* can express different qualities temporarily due to environmental factors. For example, growing a plant in high light can result in smaller, darker leaves and shorter peduncles and petioles.

Due to hybridization, the natural variability of *D. foetida*, and general confusion about which characteristics actually define a subspecies or variety, most *D. foetida* on the market can't be reliably identified as a "true" species, unless it was propagated by a reliable breeder from materials with provenance info attached. Some designators like "crispa" are based on characteristics that are considered unreliable in the official descriptions, and are basically meaningless! After many years of growing, I consider most *D. foetida* offered by sellers to be hybrids unless provided information to suggest otherwise.

However, staunch identification of our plants isn't necessary for most of us. Growers who enjoy a plant that thrives in a variety of soils and water conditions and is fairly resistant to pests will have a great time cultivating

Dorstenia foetida, and will be rewarded with its cheerful inflorescences nearly year-round. That said, the next section will review some of the plants in this group that you can readily find in cultivation.

In cultivation

In addition to the generic “*Dorstenia foetida*”, this section will review a few of the *D. foetida* group that you might find in cultivation, especially while browsing at local nurseries or online.

- ***Dorstenia foetida* “var. *crispa*”:** this name is used to describe any foetida-group *Dorstenia* with crisped leaves, though I’ve also seen it used to describe plants with crenate or dentate leaves as well. I’ve also seen plants with this quality humbly named “*Dorstenia* hybrid”.
- ***Dorstenia* ‘Lav 10341’:** Botanist John Jacob Lavranos collected and added to his field notes a large number of plants, including many specimens that for years have remained formally unidentified. Whenever you see a ‘Lav [number]’ designation, this refers to the collector (Lavranos) and the corresponding number from his notes. In the case of ‘Lav 10341’, it is also sold under the name of *Dorstenia foetida* ‘Superclone’. 10341 is easily distinguished by its smooth green epidermis and chunky stem, its reluctance to branch appreciably, and its stout inflorescences with blunt appendages. The original plant was collected in Somalia during a trip by Lavranos and Horwood in January, 1973.
- ***Dorstenia* ‘Lav 20542’:** This plant was originally described as *Dorstenia foetida* from Saudi Arabia, but does present some interesting differences, such as the larger and wider inflorescence when compared to the typical form seen in cultivation. This plant is often mistakenly sold online as the incorrectly numbered ‘Lav 30542’.
- ***Dorstenia* ‘Lav 24877’:** Another Lavranos plant, this is a popular clone in Japan known for its “long hairs,” ie the attractive long, threadlike stipules that may be retained on the body of the plant for some time. This plant seems, to me, to share some superficial characteristics with *Dorstenia horwoodii* due to the bicrenate margins and the shimmery metallic quality of the leaves. In his notes, Lavranos described this original specimen as being a *Dorstenia* sp. originally collected from Somalia, and with the note “Oblique spine.” This plant is often mistakenly sold online as the incorrectly numbered ‘Lav 23877’.
- ***Dorstenia* ‘Thamaka’.** A cultivar which appeared on the market in just the past few years, this was named



The chunky, blunt appendages of *Dorstenia* ‘Lav 10341’.



Dorstenia ‘Lav 20542’



Dorstenia ‘Thamaka’



Dorstenia ‘Lav 24877’



Dorstenia ‘Lav 24877’

for where it was developed, in the city of Tha Maka, Thailand. It has deep green, crenate leaves that are folded up like a taco shell. An unusual and attractive cultivar from Thai breeders, who remain at the forefront of *Dorstenia* hybridizing.

- ***Dorstenia foetida* variegated:** Any number of variegated *Dorstenia foetida* seedlings available on the market. These often hail from breeders in Thailand as well, who are highly adept at creating plants with exceptional bright white variegation. Breeders have also managed to create variegates of *Dorstenia horwoodii*, which makes any variegated foetida on the market suspect, as hybrids are also actively being created and sold from the same vendors.
- ***Dorstenia foetida* crested:** A crested form of *Dorstenia foetida*. These will often have a large club-like head filled with leaves. Jared was kind enough to procure this one for me; they are again being affordably produced en masse in Thailand, and are a fun addition to any crest-enthusiast's collection.
- ***Dorstenia horwoodii*:** Despite being a different species, I include this one in the list because it is commercially available in the United States and is also highly likely to be an un-true species due to hybridizing (at least, based on formal identifiers). Since it can easily hybridize and has many superficial similarities to *Dorstenia foetida*, I'm including it in this list of foetida-adjacent plants in cultivation.
- ***Dorstenia* sp.** I felt like including this one here because I have one single seedling of this plant, named "*Dorstenia* sp." by the seller, and I have been extremely taken with its hairiness and fully silver skin! This plant in adulthood has retained its fuzziness and it's skin is remarkably less green than any of my other clones. Unfortunately I still have no information about this plant; it could be a cultivar or some species/ variety, but without collection data all I can say for sure is that it is a mystery. It amazes me how variable *Dorstenia foetida* can be, and how many enjoyable cultivars still exist for us to appreciate.

I hope you enjoyed this overview of *Dorstenia foetida*, and if you haven't already, consider making some room in your own collection for this great plant!

Der-shing Helmer

All pictures in this article, if not labeled otherwise, are by the author.

Sources cited

- Berg, CC.
- Horwood FK. 1974A. Some notes on the genus *Dorstenia*. Part I, *Cactus and Succulent Journal* (US), 46: 223-230.
- Peter Forsskål. (n.d.). In Wikipedia. https://en.wikipedia.org/wiki/Peter_Forssk
- Strlič, M. 2004. The Malodorous or the Curly? Unveiling the Identity of *Dorstenia foetida*, *Cactus and Succulent Journal* (US), 76:150-155.



Dorstenia sp., a specimen I acquired that only produces female flowers. *Dorstenia* can surely offer a lot of variety



Dorstenia sp. with unusually bristly hairs on the petioles

From the New Member Coordinator - Teresa Podlipny

Attention new members of HCSS: You are invited to attend a pre-meeting social on Wednesday September 24th at 6pm. This is a wonderful opportunity to mix and mingle with other new members and get to know the established members. Have any questions about Cactus or Succulents? Don't know your Gymnos from your Astros? We are here to help!! Members: Please bring a snack to share and all your Cactus and Succulent knowledge!! Looking forward to seeing everyone at the HCSS Social Hour and as always there will be a free plant giveaway at the end of the general meeting.



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