

Six Easy Stapeliads

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This group fascinates many because of the weird stem shapes, star-shaped flowers, and difficulty of growth of some species. I still remember my excitement at age 10 seeing a one for the first time: the large bed of *Stapelia gigantea* in the desert dome at Mitchell Park in Milwaukee, blooming crazily and stinkily. I knew then that I wanted to grow this plant, and I still grow cuttings from my original plant, bought for me in Milwaukee by my grandfather when I was 13. (I am just out of my teens now.)

They are in the milkweed family, which can be told from the five-pointed flowers, the complicated reproductive structures at the centers of the flowers, the paired seed pods, and the round tan seeds with silky parachutes. In nature, the pods open, and the seeds drift away on the breezes, to be deposited in the litter accumulating at the base of a shrub or tree. There, where conditions are shadier and more moist than out in the open, seeds sprout and grow on. In habitat, these plants are almost always found growing out from the trunk as a skirt. They rarely have the purplish tones found in sun-grown plants in pots. To my knowledge, their only sun-loving relatives are hoodia and pseudolithos.

I have grown and flowered over 50 different stapeliads since then, both easy and hard ones. For anybody wanting to grow them, I would recommend the following six as being easy to grow, and representative of the group.

Stapelia gigantea

Considered by botanists to have the second-largest flower in the world (up to 16 inches it is said) though my largest has been 14 inches. Flowers are starfish-shaped and colored, with fine hairs and thin purple stripes. The plant is large as well, with upright stems to eight inches high, branching from the base and growing outward. The stems are four-sided, with a view from above looking like an X, and there are tiny leaf nubbins along the edges at regular intervals. The plant can easily exceed three feet in diameter in the ground under a shrub or tree, but will bloom well in a six-inch pot. The blooms come on new growth towards the end of the summer and take days to expand, looking like tan pointed balloons, until they finally open and release their putrid aroma. The older parts of the plant die after a few years, with new growth continuing from the periphery. It comes from southeastern Africa. (By the way, the world's largest flower belongs to rafflesia, a parasitic plant from the jungles of Southeast Asia whose relatives were unclear until recent DNA work shows it to belong in the Euphorbiaceae!)

The plant is quite tolerant of damp conditions as long as the temperature is above about 70 degrees Fahrenheit. In fact, it grows much better in the summer if it does not dry out completely. It will grow well with quite a bit of sun, where it takes on a brown-purple hue, but has a beautiful velvety green sheen to the stems if grown in part shade. It blooms better with lots of fertilizer while growing. A large shallow pot or dish or very large hanging basket suit it well. It will survive most Phoenix winters outdoors in the ground under a shrub or tree. During the winter, in a container, keep it dry except a rare

sprinkling, and above freezing, with the brightest light you have. Like most stapeliads, it tolerates no frost at all, but will survive down to freezing if dry.

The plant roots easily from cuttings taken during warm weather, and a two- or three-stem cuttings taken in spring should bloom that year. Root them in a four-inch pot with any soil. Many people take new cuttings each year and discard the old plant to keep from having an octopus on their hands. The Arizona State Fair has a special rule for exhibiting this plant: no entries with spread greater than three feet in any direction.

Like this whole group, its chief problem is the mealy bug. If your stapeliads just don't look right, it is almost certainly because they are infested with this pest. Mealies attack the bases of the plants, causing rot at ground level. If you find this happening, lift off whatever plant material looks still alive, cut off the rotten parts, dip in rubbing alcohol, and let dry a day or so. Attempt to reroot on the surface of potting soil or sand kept moist, warm, and bright (but not direct sunlight). If it is the dead of winter, you will do better keeping the cutting dry and cool until it warms up in the spring before rooting. Unrooted cuttings may survive up to a year on a bench!

To prevent mealy bug attack, I used to soak all my asclepiads with Orthene (a systemic insecticide) in the spring and fall. Now I can use imidacloprid in the soil. This is a semi-synthetic insecticide related to nicotine. It is not very toxic to us but is very toxic to insects (and fish.) It is sold as Bayer Grub Granules, and I incorporate some into my potting soil. Sue Hakala has a pesticide-free growing method to prevent mealy bugs. She puts a substantial layer of rock over her soil and sets the cuttings on the rock. They root through the rock into the soil, and the air circulation at the base of the plant is not to the mealy bug's liking. I plan on trying her method.

Stapelia asterias and hybrids.

These have stems a little shorter than *S. gigantea*, but more thick in cross-section. The plants stay compact and do not spread, looking good in a 4-8 inch pot. The flowers are dark purple, about 3-4 inches across, and very hairy. Surprisingly for a stapelia, they have no smell. Mine set seed readily when I lived in California, and I have grown many generations. Here in Arizona, mine never sets seed. Any soil mix is fine. It looks and flowers better if not allowed to go bone dry during warm weather. It comes from southern Africa, where it lives in a winter-rainfall climate, though it grows in our summer.

Stapelia variegata, now known as *Orbea variegata*.

This was the first stapelia, described, by Linnaeus in the 1750's. It has long six-sided stems up to 18 inches long, which tend to hang down, so it is often grown in a basket or tall pot. The 2-3 inch flowers are on long peduncles (stalks) and waxy rather than hairy. They have a prominent raised ring. The background is yellowish tan, with purplish mottling. As you would expect from the name, the flowers are very variable from plant to plant. There is no smell. Root individual stems in potting soil, and grow on in regular potting soil. It is slightly more prone to rot than the above two, so let it get almost dry

before watering during growing season, and keep it mostly dry in the winter, under bright light. It is also from southeastern Africa.

Huernia confuse

This is a small-growing plant, usually not more than four inches high. The stems are bright green, four-sided, with prominent teeth at the angles. It branches well and soon fills pots with compact clusters of stems. The flowers are about 3/4 inch in diameter, waxy, mostly chocolate with yellow stripes, and a prominent raised annulus (ring) which gives the plant its nickname, "life-saver plant." Root the cuttings in loose soil. Let it get almost dry between waterings in the growing season. If you can keep it warm and brightly lit in the winter, it will keep growing and flowering; otherwise, keep mostly dry and brightly lit. As with most huernias, there is no smell.

Huernia primulina

This plant has four-sided stems a little smaller in diameter than *H. confuse*, but is often slightly taller and with more teeth. The flowers are about 1/2 inch across, varying shades of yellow to yellowish green, and carried in clusters of 5-10. The books say no smell, but sometimes the freshly opened flowers have a strange pungent smell. It does best in very well-drained soil. Treat it like *H. confuse* in the winter.

Huernia keniensis

This is a popular plant. It combines characteristics of several species. The stems are bright green, six-sided, with small teeth, and up to two feet long (though often shorter). The flowers are 1/2 inch in diameter, open bells, dark burgundy and borne at the bases of the stems in clusters most of the year. It makes a good hanging basket plant. It never seems to rot no matter how wet it is unless it has mealy bugs. Grow it in anything from a glass of water to pure sand to potting soil to cactus mix. I first bought mine at a yard sale in Tucson. It was growing in an aluminum drinking glass (remember those from the 60's?) rooted in sand, with no drainage hole. Mine grow and flower in light from full sun to deep shade.

Try these first. When you have learned to defeat mealy bugs and get these easy plants through the winter, go on to try *Edithcolea grandis* and *Stapeliopsis neronis*.