The Savage Garden: Drosera madagascariensis, planting media and Utricularia.
The title was changed for the electronic version 5 January 2025. The original is below.

THE SAVAGE GARDEN

PETER D'AMATO • California Carnivores • 7020 Trenton-Healdsburg Road • Forestville, CA 95436 • USA

Keywords: cultivation: *Drosera madagascariensis*, planting media, *Utricularia*.

Coco Chips!

Roger Hoelter of Santa Barbara visited me this past weekend, and with him came two large sacks of another coconut horticulture product. The label on the sacks simple said, "Coconut husk chips: a product of Sri Lanka." Airy and lightweight, these chips are about 0.6 cm (1/4 inch) on a side. It may be good for *Nepenthes* soil media, and looks more promising than "Coco peat" was. I have mentioned in a past column (CPN 27:4, p100) my disappointment with the Coco peat product, which in my experiments quickly broke down into a mushy, slimy mess. These new chips look much more durable and long-lasting. Roger said orchid growers in Santa Barbara were disappointed in this new product because it held water too well (most orchids appreciate drying out somewhat between watering). Sounds perfect for *Nepenthes* and perhaps *Heliamphora*, so I will experiment with it as an ingredient in soil recipes and report later on the results.

An interesting (and hopefully the last) afterword to the Coco peat disappointment occurred at this year's Nor Cal Show, where wholesale vendors catering to the garden industry in northern California display their wares. You may recall that it was at last year's show that I was first seduced into trying Coco peat, as every vendor of soil products was pushing it as the most wonderful ingredient to hit the market since perlite. This year, however, Coco peat was scarcely seen. When Marilee questioned one vendor about this absence, she was told most growers had disappointing results using Coco peat because of a high salt content of the coconut fiber! Coconut palms grow best along the salty beaches of the tropics, tolerant of salt water and salt spray, and thus it remains in the coconut husk and its pulverized peat product that first seemed so promising. Coco products from Sri Lanka, which are grown inland, are allegedly low in salts—much to my relief as I had just used the Sri Lanka chips in my *Nepenthes* mix.

Drosera madagascariensis

Some folks on the carnivorous plant listserver chat line inquired about a plant I have circulated as *Drosera* "Botswana." Although I am not a taxonomist, it appears this plant is *Drosera madagascariensis*, native to Madagascar and Africa.

This plant was originally given to me by an actor who, at the time, did stunt work and played roles on the popular and controversial television show called "Power Rangers." I have not seen him in a few years, but if my memory serves me correctly, he said he found the plant growing in a water ditch close to the Botswana airport.

I have become very fond of this plant, and many of my visitors have been pleased with it as well. This strain of *Drosera madagascariensis* forms a cluster of circular leaf blades with narrow petioles about one or two inches long, reminiscent of *D. intermedia*. Like that species, it forms long trailing stems, but up to 30 cm (12 inches) long. It makes new shoots from the base of the stem, so in time the plant produces a clump of stems of varying lengths, each cloaked with dead leaves and topped with an attractive rosette of new lamina. The leaves are pale in subdued light, but in strong light they become a lovely crimson.

I grow this plant in my warmhouse. In winter the growing points die back and the plants go through a dormancy for a few months. I never let the soil dry out. In spring, new plants appear from the lower stems and roots. Customers report that in terrariums under grow lights and a longer photoperiod, the plant continues to grow sending up new stems as older ones die away.

One of my specimens sent a flower stalk of about 15 cm from a lengthy stem. I missed the blooms and do not know their color, but I assume they are white or pink. They self-pollinated and produced abundant seed. I have propagated the plant easily from leaf cuttings. I have yet to find out if the plant is tolerant of light frost when dormant, but my guess is that it is. I have not yet experimented with this wonderful species as a windowsill plant, but for greenhouses and terraria it is ideal!

A Bowl of Bladderworts

This is not some side-dish served up for dinner by the Munsters or the Addams Family, but is an interesting way to make a carnivorous plant color bowl using similar species of one genus. The end results can be a beautiful display of miniature, orchid-like flowers that will provide waves of delicate color explosions that even your grandmother will love.

The idea is simple and obvious: grow several species of terrestrial or semi-aquatic bladderworts together in one container. I like to use decorative, glazed ceramic bowls without drainage holes, and of a neutral color. Small bowls less than 20 cm (8 inches) are suitable, but large ones 25-35 cm (10-14 inches) are even better, as they will ultimately accommodate more plants. Their depth should be at least 5 cm (2 inches).

Use a pre-wetted planting mix of one part sphagnum peat to one part sand. You could use long-fiber sphagnum, but pack it tightly into the bowl. The planting medium should fill the bowl to 1 or 2 cm (0.5-1 inch) below the bowl's brim to allow for occasional flooding.

I like to use terrestrial species from temperate, warm-temperate, and subtropical climates that flower fairly regularly or profusely during much of the year. I insert small divisions of established plants, about 2.5 cm (1 inch) square, into the surface of the soil. For a 30 cm bowl, about two or three divisions of each species, planted randomly, works well. In a few months these plants will fill the soil with intertwined stolons and bladders, while the surface becomes covered with a thick mat of tiny stolons. Several species must be used to produce the best effect.

Two species that flower the most and can be in bloom for months at a time are *Utricularia sandersonii* and *U. livida*. The "blue form" of the former plant flowers less prolifically than the common variety, but it spreads by rapidly growing stolons above the soil surface that may even spread to adjacent pots. Another good species is the famous weed, *U. subulata*, with its delicate sprays of sulfur-yellow flowers. When the frequently produced cleistogamous (non-yellow) seed capsules are produced, I quickly trim them off as I find them messy and unsightly. *Utricularia cornuta* is similar in shape and color but comparatively huge and longer lasting.

Utricularia dichotoma will provide on-again, off-again tall spikes of deep purple/blue, fan shaped blooms that will tower to 30 cm (12 inches) tall. *Utricularia bisquamata*'s flowers are tiny, multicolored gems, but are larger and more brilliant in full sun. Reaching their peak in late summer and autumn, *U. graminifolia* provides lower-growing, pink and puffy blooms with a blue tinge for several weeks. *Utricularia arenaria* has small, deeply purple flowers with a touch of yellow.

Other species may work well, but the above plants are the most commonly available and flower for long periods. A bowl of bladderworts requires partly to full sun conditions for the most profuse color shows. Many terrestrial bladderworts flower *en masse* after periodic floodings in the wild, so every month or two during the growing season I raise the water level to a shallow half inch or so above the soil surface and keep it flooded for a week or two. The rest of the time the soil should be damp to wet. Do not fret about feeding them daphnia or other tiny critters. Instead, about once a month during the warmer seasons, lightly mist the surface stolons with an epiphytic, acid, or orchid fertilizer diluted to about 1/4 the recommended strength. Always water with pure water. All above species do nicely on sunny windowsills, under growlights, in cool and warm greenhouses, and can tolerate light frosts or occasional freezes of brief duration, so they make handsome patio or deck displays in suitable climates. In the summer, when several if not all the species flower at the same time, the results can be most impressive, and may win you a ribbon at the county fair!