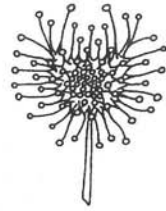


SAVAGE GARDEN: HIGHS, LOWS, AND MEDIA

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California Carnivores



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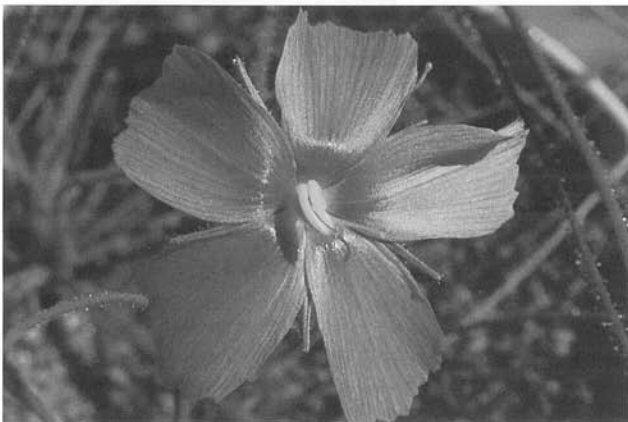
Highs: Another Tortured Carnivorous Plant

Last autumn I took a *Pinguicula agnata*—one of the Mexican butterworts—out of my potted terrarium and placed it on my screened porch here in northern California. Although the incredibly wet winter was mild, in December we had a brief nasty freeze and the porch hit a low of -4°C (25°F). The butterwort was unharmed. I had previously tortured *P. esseriana* down to -7°C (20°F) with similar results, but this new experiment was interesting because the winter rosette that *P. agnata* forms is not as succulent as those of *P. esseriana* and other Mexican species. I assumed the tender foliage would have been severely damaged after being frozen for several hours. Wrong!

Lows: Frozen Rainbows

Thanks to Glenn Rankin (of the Bay Area Carnivorous Plant Society) who germinated a large number of *Byblis gigantea* using gibberellic acid, I had a few extra plants I could finally torture. Now remember that this Giant Rainbow plant comes from Western Australia and does most of its growing during the cool, wet winter and spring. By late summer, as the soils dry out, it usually dies down to its woody stem. New shoots develop from this stem when the winter rains return.

One plant I grew in a 10 cm (4 inch) pot on my deck, in full sun, kept permanently wet by a water-tray system. A second plant I put in a wine-barrel bog, along with *Sarracenia*, Venus Flytraps, and other typical bog plants. Kept wet all summer both plants thrived and flowered continuously until November, as I expected, even though summer temperatures rose to 41°C (106°F). In December we were hit by the



B. gigantea, by B. Meyers-Rice.

freeze. Both plants were frozen solid.

It is now early March, and after El Niño rains of 180+ cm (70+ inches), the potted plant on my deck has a slowly browning stem and new shoots appearing at its base. I have no doubt this plant will regrow beautifully. In contrast, the plant in the bog was submerged under water for days at a time and was completely shaded in winter. This plant did not survive.

Media: Coco Peat

A few years ago I became a little nervous when there seemed to be an effort to ban peat moss harvesting from the *Sphagnum* bogs in Canada. The removal of peat for horticulture has become controversial. This is understandable, for while peat moss companies claim to do their best to return these ravaged habitats to the road of recovery, peat moss beds take hundreds of years to form, and one would imagine the destruction of these wetlands to be incredible.

In defense of the Canadian peat companies, Canada holds 25% of the world's peat bogs, but less than .02 percent (160 km² or 40,000 acres) is being mined for horticulture. Almost none is used for fuel. On the other hand, of the countries that use peat for fuel, Ireland has only 5% of its peatlands remaining, Finland has 50% left, and Russia—which accounts for 93% of the world's peat production—is also mining their peatlands at an alarming rate.

My own philosophy—shared by most—is that whenever possible, whatever humans use in life is best grown and raised by them, rather than removed from rapidly diminishing natural habitats. What if peat harvesting the future was seriously curtailed? Most peat moss in horticulture is used as a soil amendment, and can be easily replaced by various manufactured mulches using recyclable products. But can we grow Venus Flytraps in anything but good old *Sphagnum* peat moss?

In the last couple of years a new product has appeared in horticultural trade called "Coco Peat." It is manufactured from the fibrous husk of the seed of coconut palms, which are cultivated by the millions in tropical countries. *Cocos nucifera*—the palm of a thousand uses—offers us yet another product. The husk is ground to the consistency of sawdust, then compressed into solid, lightweight bricks that are pale brown in color. When these bricks are soaked in water they swell in size, turn reddish-brown, and crumble into a consistency almost identical to *Sphagnum* peat moss. Like *Sphagnum* peat, it holds a surprising ten times its weight in water. Although not quite as acidic as peat moss, Coco Peat is still an impressive 5-6 on the pH scale, 7 being neutral.

I know of only one person who has used the product for *Sarracenia* and Venus Flytraps for over a year, and he has had good results. I myself am now experimenting with it. After eight weeks, it is so far, so good, for a Venus Flytrap, a Cape Sundew (*Drosera capensis*), *D. schizandra*, and a sweet trumpet (*Sarracenia rubra*). It should be an excellent ingredient in soils for plants such as Mexican butterworts, *Nepenthes*, *Heliamphora*, and *Byblis*.

That Coco Peat is rapidly becoming popular in the nursery trade became evident to me at the recent NorCal Trade Show in Northern California. Almost every wholesale exhibitor dealing in soil products had Coco Peat prominently displayed, and free samples were readily available. In small quantities it is more expensive than peat moss, but the wholesalers I spoke with expected it to become competitive in time.