SAVAGE GARDEN: SLACK-POTTING THE DEWY PINE

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Over twenty years ago, British nurseryman Adrian Slack originated a rather clever way to successfully grow the often temperamental dewy pine (Drosophyllum lusitanicum). Glaringly omitted from my own book, The Savage Garden, I wish to correct that oversight here, for this method, called “Slack-potting”—a term coined by Barry Meyers-Rice—is an ingenious method of cultivating Drosophyllum with long-term ease.

We must remember that dewy pines are not wetland plants like most other carnivores. Instead, they are typically found on sandy, gravel slopes that are dry most of the year, and usually alkaline in pH. The plant is found in widely scattered sites in Portugal, Spain, and Morocco. The climate is warm-temperate and Mediterranean, which means that most of the rainfall occurs in the cool winter months, with very rare frosts. Summers are warm and dry, but plants near the coast can experience early morning fog drip, which may be absorbed by their leaves.

Seed is usually the only way to propagate Drosophyllum (but see CPN 17:4 p106—ed.), and since plants despise root and stem disturbance they are never sold through the mails. Seed is usually produced in late spring or early summer and can germinate readily if very fresh. Older seed benefits from several methods of pre-treatment. You can scarify the hard seed coating by rubbing the black, egg-shaped seeds with sandpaper until the whitish interior becomes slightly visible. You can also soak the seed for a day or two in a cup of water in which you have added a tiny bit of powdered gibberellic acid—about 0.5 cm (1/8 inch) collected on the tip of a toothpick works well. I have also scarified the seed and then soaked them in a solution of one-drop Superthrive™ per cup of water.

Slack warns against moving freshly germinated seedlings about, and prefers to sow a few seed directly in their permanent pots, allowing only one plant to grow by removing any others that germinate. This can be a hassle and waste of seed if you have more than just a few to sow, but Slack's warning is legitimate since the first tiny root to appear from a seed will rapidly plunge into the soil medium and can be killed if disturbed. I prefer to sow numerous seed on damp vermiculite (they will germinate on any damp substance, even a sponge) and I check them daily after a week or two. When I see the first white root appear on a seed, I immediately and gently remove it via forceps and set it upon the surface of its permanent pot.

Now this is where the Slack-potting begins. Take a 10-15 cm (4-6 inch) pot made of unglazed terra-cotta clay. Place a wad of damp, long-fibered sphagnum moss through its drainage hole, totally blocking it. As a soil medium, I use one part each perlite, vermiculite, and horticultural sand. Slack includes a portion of John Innes Compost #2 (a humus-based house plant soil), but I find this component to be unnecessary. (It is only available in Britain.) Dampen the mix with purified water and fill the clay pot firmly with it to the brim. Gently place your germinated seed on the center surface of this, one seeding per pot. Place the pot in a shallow water tray in a sunny place with good air circulation, keeping the soil damp to wet for several weeks as the plant establishes itself.

Let the baby plant grow for several weeks, as Slack recommends, before proceeding with phase two. The plant will grow rapidly and when it has several leaves...
you are ready to Slack-pot it.

You will need another pot (with drainage holes) at least two inches larger than the pot containing the plant. Slack recommends another clay pot, but in hot, dry climates like California, I use plastic. Block the drainage holes with long-fibered sphagnum. Fill the pot with the perlite-vermiculite-sand medium only as deep as to allow the smaller potted plant to sit comfortably on the medium and have its rim at the same level (or just slightly above) as the larger pot. In the gap between the two pots, tightly pack long-fibered sphagnum.

The whole reason for this elaborate double-potting is to keep the soil around the stem and upper roots on the dry side, or just barely damp, since the prostrate stems tend to rot if left on permanently wet soils. Initially you can keep the whole double pot in a shallow tray of water as well as gently watering the plant itself, keeping the soil damp. But in a very few months the roots of your dewy pine will enter the soil of the larger pot through the sphagnum-crocked hole of the smaller. You can then water the plant via the sphagnum-moat that separates the two pots. Alternatively, you can set the Slack-potted plant in a shallow water tray, and add just enough water to keep the sphagnum-moat damp. Just enough water will permeate the inner clay pot to keep your dewy pine happy, and the deepest roots will find plenty of moisture in the medium of the larger container. This probably recreates the natural situation well, for in the wild dewy pines have roots that are extensive, obtaining moisture from deep underground. Some also believe the plants absorb moisture in summer from condensing early morning fog, but misting the plant is not required.

Slack-potting a dewy pine works best for greenhouse cultivation, particularly in humid climates with long, cool winters, such as Slack’s own England. It is not quite as necessary if you live in a Mediterranean climate similar to the dewy pine’s. I have seen photographs of huge Drosera plants grown in giant clay pots outdoors in Australia. Geoff Wong’s prize winning plant photographed in The Savage Garden was a judiciously watered specimen grown in a plastic pot of primarily perlite and a tiny bit of peat, then placed in that lovely glazed ceramic ornamental. I myself grew one outdoors on my deck in northern California, using a plain clay pot. The plant survived months of winter rain, a hard freeze, and baking summer heat (see my 1995 column, “How to Torture a Carnivorous Plant”, CPN 24:4, p99.). So while not for everyone, Slack-potting is ideal for many growers. At my nursery just this past week we Slack-potted several dewy pines. In my imagination, I visualized Adrian visiting us in his white suit and Panama hat, nodding his approval as we shared a glass of wine.

Looking Back: CPN 25 years ago

Dave Kutt wrote about how Aldrovanda, often considered fragile in cultivation, is apparently quite durable when it comes to freezing! He discovered this during a mishap that occurred during his plants’ winter dormancy: “After six weeks at 38°F, the refrigeration equipment malfunctioned and exposed the jar of living Sphagnum, water, and turions to below freezing temperatures somewhere around 25°F. The water became a solid block of ice with turions inside. The mass was maintained in this frozen state for five months and after thawing, no harm had been done to the turions whatsoever!”