

## MESEMBS

By Sue Haffner



**Mesembs in Namaqualand**  
Photograph by Tim Peatling

The mesembs are also known as “living stones”, “mimicry plants”, “ice plants” and other similar popular names, due to the external appearance of many of the more commonly---grown genera, such as Lithops, Conophytum, Faucaria, Argyroderma, etc. There are about 127 genera comprising 1,700 species, all endemic to southern Africa, with only a few exceptions. They have succulent leaves and bright, shiny, insect---pollinated flowers. They are also characterized by hygrochastic fruit (the capsules open when it rains.) You can see capsules present on the plant in the photo opposite (from Mesemb Study Group bulletin, July 1996). The seed capsules seem dry and hard when you see them, and they can remain in this condition for years, if they have to. When rains finally arrive, the capsules open at once and the seeds wash out. Because of this adaptation to their usually harsh environment, mesemb seeds remain viable for many years.

## HOW DO YOU GET MESEMB SEEDS OUT OF A CAPSULE?

Immerse the capsule in water. I put a bit of water on a white plate (white, so I can see the seeds) and put the capsule in the water. In only a few minutes the capsule will open and the seeds will start to spill out. I have done this only with Lithops capsules that donors have sent to the CSSA Seed Depot, but I’m sure other mesemb capsules would respond in a similar manner. I sometimes take a straight pin and dig out some stubborn seeds. When the capsules have given up all their contents, I drain off the water and pour the seeds onto paper towels. When they’re dry, they can be scraped off onto a piece of creased white paper. The seeds are quite small. They’ll roll into the crease in the paper, from which they can be poured into an envelope—or sown.

### MESEMBS FROM SEED

(article from the April 2010 issue of Spinal column, the newsletter of the Michigan Cactus & Succulent Society),  
by Jim Eisele

“The reason I started growing mesembs from seeds was an easy one. Every time I bought a mature plant, I got to enjoy it for about 6 to 18 months and then I killed it. I could not explain why. What was I doing wrong? Watering them too much, watering at the wrong time of year or not watering enough? I needed to find out what caused the problems and learn more about them in order to grow them successfully.



**Pleiospilos nelii**

**Photograph from the Bakersfield CSS**

I was fortunate enough to have a chance to visit Steve Hammer at his greenhouse in Vista, California. I confided in him my lack of luck with *Pleiospilos nelii*. He explained to me that it would be easier to grow them from seeds and encouraged me to try. So he gave me 2 or 3 seed---pods of *P. nelii* to try my luck.

I got the nudge from Steve! I was hooked, too! Soon I ordered mesemb seeds from the Cactus & Succulent Society of America and the Mesemb Study Group, which I also joined. Below is my method. It has worked a few times for me. However, I think everyone should try to develop his or her own method.

First, for the soil mix: I did not do a lot of measuring and used only three ingredients: seed starting soil, Dry Stall product (pumice)—perlite would work, too—and 2NS which is an aggregate used with any soil needing better drainage. It is like washed sand. Pool filter sand would work fine. Combine all three mediums together with a little water and mix until the soil falls apart when compressed. I did not bake or microwave it. I just used it as it was.

Second, I filled the soil in square plastic pots, 2.25" and place them into a tray of water so that the soil could wick up the water. After the water darkened the soil, I drained the pots onto paper towels and carefully added the seeds and a label.

Previously, I had been using the zip---lock baggie method to grow cacti so I decided to use the same method for mesembs. The pot size allowed me to put two pots into one zip---lock baggie. When the first wave of germination takes place, it is a good idea to remove the pots from the baggie and place them in the tray. Prolonging the time in a moist baggie will only kill them!

Thirdly, I put the pots about eight to ten inches under florescent light and on a heat mat. I kept light and heat during the day and turned them off at night. The heat mat is not strictly necessary but since I had one I decided to use it.

Young mesemb seedlings are thirsty little green globs which need to be misted daily, sometimes twice a day. If pots seemed to be drying out to much, I would occasionally bottom water them using a tray.

I have had pretty rewarding results ... The experience has been very interesting and challenging. Try some mesembs from seeds. You'll enjoy it!"