

Mesembs

Leo A. Martin

Linnaeus called these plants Mesembryanthemum, which means mid-day flower. As time passed, and more and more were discovered, more genera were established. The common name Mesembs is often used for the whole group. There are several dozen genera and probably over a thousand species.

They are now considered members of the plant family Aizoaceae. All can be identified by the peculiar seed capsule, which, in most, has water-sensitive valves, which open when wet and close when dry. It is amazing to put a drop of water on a capsule and watch it open.

Most come from Africa, particularly in the south. Mesembs have adapted to all the climates of Africa and given species have particular cultural requirements. Once the preferred growth and rainfall pattern is understood their culture becomes easier. For this reason, reading about them or asking somebody with experience growing them in your climate is important when first beginning to grow them.

Some are easier to grow than others are. Winter and spring visitors to California will have seen acres of land along freeways or on slopes covered with sheets of pink-flowered *Delosperma* and *Carpobrotus*, common ice plants. Hearts and flowers (*Aptenia cordifolia*) is a ground cover used here in Arizona.

Many of these plants are reduced to nothing more than spherical leaf pairs. Lithops (Greek for "stone face") and Conophytum ("cone plants") come to mind. Lithops do look like pebbles. Conophytum are small green bubbles. Both can be grown here successfully, though Lithops are probably easier. Plants grown from seed in Arizona seem to do better here than California imports, which often melt when they first experience our heat. I have never had any bought in California in the spring survive the first summer.

Mesa Gardens is an excellent source for seed. The catalog describes four growth patterns for these plants:

- A) "Robust summer growers, can be grown outdoors from spring to fall, indoors when cold" (most of the ground cover ice plants like *Aptenia*, *Carpobrotus*, *Delosperma*, *Drosanthemum*)
- B) "Compact spring to fall growers, most active growth in spring and flowers either in the spring or fall, keep cool and quite dry in the winter (*Aloinopsis*, *Carruanthus*, *Faucaria* (tiger's jaws), *Lithops*, *Pleiospilos*, *Rhombophyllum*, *Titanopsis*, *Trichodiadema*)
- C) "Grows from late summer to late winter when cooler with shorter days. They like frequent light watering and mist when active. They are dormant from spring to summer

during heat. If very hot in summer give some extra shade with only occasional light water" (Argyroderma, Cheridopsis, Conophytum, Mitrophyllum)

D) "Opportunists, no strict time, will grow when water and sunshine is given and temps are moderate. When summer heat is high they stop growing" (Bijlia, Cephalophyllum, Gibbaeum, Glottiphyllum, Lapidaria, Schwantesia)

Birds love to peck these to death, so protection from pests is a must.

In my limited experience, the A and D plants are easiest here in Phoenix. Some B plants are fairly easy; C plants require strict attention to not watering at the wrong time of year.

The A plants are mostly ground covers that don't look good in pots, but annuals in genus Dorotheanthus are spectacular early spring flowers. They are sometimes known as livingstone daisies. Sow seeds in the ground in late fall or early winter like you would wildflowers, or put them in a large dish. Keep very moist until well up. Enjoy the spectacular show. Be sure to save seeds for next year.

Some of the B plants prefer winter growth in our climate, but not Lithops. I've had most luck (in order from most success to less success) with Rhombophyllum, Ruschia, Bijlia, Carruanthus, Lapidaria, Aloinopsis, Titanopsis, Pleiospilos, Lithops, and Schwantesia.

C plants are some of the best mesembs: Argyroderma, Cheiridopsis, Mitrophyllum, Monilaria. They must not receive summer watering, when they are dormant, or they are likely to die. Some tolerate a little rain. Then they want to be wet all winter when they grow.

The D plants won't die if you accidentally water them at the wrong season. They are like Baja plants; they grow whenever it rains.

Online, there's a Yahoo discussion group called mesembs. I have learned a tremendous amount since joining this online group.

The best source of seeds is Mesa Garden, P. O. Box 72, Belen, NM, 87002, 505-864-3131, www.mesagarden.com

There is a Mesemb Study Group in England with a journal, <http://www.cactus-mall.com/msg/index.html>.