

Winter-Growing Mesembs Through the Year

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The vast quantities of mesembs come from areas of South Africa subject to what's called a Mediterranean climate. Those of you who have not lived in coastal California, South Africa or, the actual Mediterranean region will not have experienced this climate, but it can be understood and your plants can thrive. Some mesembs come from mostly summer rainfall areas. Most Lithops are from this climate. A few come from areas receiving both winter and summer rain, and will grow opportunistically whenever there is rain. Many Baja California plants are like this too.

Most of these plants grow in small niches in habitat. However, since they can use a lot of water when in active growth, and to keep the roots cooler in the summer, I like to use deep pots for all of them. I have not had good luck with anything relatively shallower than a normal four-inch clay pot. Even small plants go into deep four-inch pots.

Most in habitat grow in soil exactly like that in our desert. Steve Brack of Mesa Garden recommends using no organic matter in the soil for most mesembs. I just dig up fine clay when it's dry and use that for soil. It's like concrete when dry, and it's heavy, but the plants like it.

I struggled with plants such as *Antimima*, *Argyroderma*, *Bergeranthus*, *Cephalophyllum*, *Cheiridopsis*, *Conophytum*, *Gibbaeum*, *Mitrophyllum*, *Monilaria*, and *Odontophorus* for quite a while until I really studied their origins and climate. Although I grew up in southern California and understood that most mesembs need the same thing until reading a few books the last few years. An excellent lecture at the 1999 CSSA Convention covered the climate of South Africa in detail. It was an eye-opener for me, and my mesembs started growing better from that time on.

The Mediterranean climate has a long, warm-to-hot summer, (but not as hot as in Phoenix!) beginning roughly in April in the northern hemisphere, with few clouds and no rain at all. The winters are cooler, beginning roughly in October, with frequent fogs near the coast and long, gentle, cool rains that may last for days. Between rains it is cool with little frost, and there are warmer days interspersed. Some areas never see frost. The Mediterranean winter is very much like ours here in Phoenix, except we can get harder freezes than is usual in California or most of South Africa outside the mountains.

The winter-growing mesembs flourish during these cool wet winters. In fact, most like to be soggy for the entire winter, and the amount of growth they produce is astonishing. As nights warm, the different genera go dormant one by one, until only the opportunistic growers remain. As I write, *Bergeranthus* sp. and *Rhombophyllum dolabriforme* have been in bloom since April.

Our summer starts, for the winter-growing mesembs, when night temperatures consistently rise to about 75 degrees. Some genera develop resting foliage (*Cheiridopsis*,

Mitrophyllum) and some just turn silvery and hunker down for the long summer. While an occasional sprinkling, maybe once a month, will not hurt them so long as they dry out quickly, they will not survive if exposed to normal monsoon rains. So, some form of overhead protection is necessary.

Many can tolerate our temperatures and sun fine, although they come from cooler areas. *Bergeranthus*, *Bijlia*, *Cerochlamys*, *Cheiridopsis*, *Dinteranthus*, *Odontophorus*, and *Schwantesia* all do fine for me in full sun in the summer. They develop beautiful pink to purple tinges to the leaves.

Some I keep outside but not in full sun. *Antimima* is an example.

Others can't use the light since they are sleeping. These I bring into bright shade and store dry all summer. I put them in a bright window that gets no direct sun and forget about them until October.

Argyroderma, *Cephalophyllum*, *Conophytum*, *Mitrophyllum*, *Monilaria*, and *Juttadinteria* fall into this category.

When nights start cooling in September or October, I move them all to a partially shaded outdoor spot, water once heavily, and wait. If they're ready, they will start to grow. If not, I wait until they are dry and the weather is a little cooler and then soak them again.

Once in active growth, I keep most of them moist all winter. I wouldn't let most stand in water—though *Cephalophyllum* would like this, I've read—but I don't let them dry completely. I fertilize weekly with 25 percent strength liquid fertilizer. Many people fertilize more frequently.

When frost threatens, I protect them. Otherwise, I let them get cold rain, sun, wind, whatever the winter brings. They like this kind of weather!

I move them to full sun for the entire winter season. I start moving them into more shade for the summer when nights are over 75 degrees. Then when it warms up again, they go back to sleep.

By the way, South African bulbs for the most part like this routine too: *Chasmanthe*, *Freesia*, *Gladiolus*, *Haemanthus*, *Ixia*, *Lachenalia*, *Ornithogallum*, *Oxalis*, *Sparaxis*, *Watsonia*. I pull off the dry leaves and stack the pots in a closet for the summer.

Many in our club have had bad experiences buying mesembs from California in the spring or summer. They just can't get used to our summer and die quickly. If I buy them in the fall or winter, though, they grow well all winter and are ready for our summers.

They are also very easy to grow from seed. Just don't let the seedlings dry out. I have had trouble with this in the past since I work long hours; next year I'm actually going to stand seedling pots in water. It is fine to sow them outside here in the winter; just protect from frost. Use garden soil and deep pots (12-ounce plastic cups work well). Cover the

pots with window screen to prevent rain from dislodging the seedlings and put them outside in mostly sunny area. Then stand back. From what I've read, many bloom the first year from seed.

They are also easy from cuttings, best taken during cool weather and active growth. Just put a fresh cutting into moist soil and keep moist. They don't need to callus. And, if a plant starts to rot in the summer, save what you can, plant the piece in soil, water once to settle the soil, keep in a shade spot, and don't water until nights cool down. I took a two-inch leaf tip cutting from a friend's *Cheiridopsis* last August and treated it like this. It started to grow in December and looks good.

Birds like to peck mesembs, so protect them.

If you've had bad luck with these in the past, try again this fall. They're not hard once you understand what they like.