Easy mesembs for Phoenix Leo A. Martin

Bijlia, Cephalophyllum, Cerochlamys, Cheiridopsis, Ruschia, and Schwantesia are mesembs, members of the ice plant family, Aizoaceae. They come from southern Africa. They do well here given just a little attention to watering and have beautiful flowers in winter. They want full sun during cool weather but considerable shade in our hot summers when they are more or less dormant. Most people have trouble with mesembs because they water too much during summer dormancy or not enough during cool periods of active growth.

Bijlia was named after Deborah Susanna van der Bijl, who sent specimens she found to botanist N. E. Brown at Kew. They are clumping plants with boat-shaped, yellowishgreen leaves and bright yellow flowers. They come from the Little Karoo north of Cape Town, and get rain in habitat in early summer and in the autumn, flowering with autumn rains. Mine flowered in December and January.

Cephalophyllum (Greek for "leafy heads") are clumping to spreading plants with long cylindric leaves. They are strict winter growers, dormant in the summer. There are dozens of species with spectacular flowers in a full range of colors and bicolors. Best is to quote Steven Brack of Mesa Garden, Belen, New Mexico:

"This is the season for Cephalophyllum to flower and the show is terrific. They are very active and thirsty in late winter and early spring. During this time, it helps to water them generously while keeping them cool and in full sun. If you can give them a burst of growth and sustain this, you will get loads of flowers and continue the show for about a month. By late spring when it turns hot they rest and their thirst drops off sharply, they will just sit inactive until late in the fall when it cools off. Many of the flowers are spectacular, the thin-leaved types like *C. pillansii* and *C. diversiphyllum* flower in profusion. In NM it is very cold in the winter but we have a lot of strong sunshine, so they are all grown in [containers.] They are best grown in bulb pans and they like to spread out.

"They [also] do well in hanging baskets, I have some in hanging pots from greenhouse rafters, and they are in full flower now. It is hard to beat *C. alstonii* for the show of huge red flowers. Another beauty that flowers readily is *C. pulchrum*, with pink flowers and golden anthers. Then when late spring arrives, they shut down and need only a little water until next winter.

Phoenix is warmer than Belen is, so just a little frost protection is needed, even so little as putting them under the eaves on cold nights. The Skirvins grow *C. alstonii* in the ground, protected from frost under shrubs.

Cerochlamys (Greek for "waxy mantle") is little-known here but should be more widely grown. It is an opportunistic grower from a part of southern Africa that may get rain at any time of year, and the climate is much like here though not so hot in the summer.

Mine survived undamaged out in the open in January 2007, and it was probably in the low 20s. The leaves are thick, three-sided, and covered with wax and the flowers a bright pink during the winter. The plant looks like it was carved from green wax. *C. pachyphylla* ("thick leaf" in Greek) is flowering for me as I write; the first plant just finished three weeks of bloom, and the second is starting. I have seen it in the Desert Botanical Garden plant shop from time to time (that's where I bought one of mine!)."

Cheiridopsis (Greek for "like a hand") have paired, often finger-shaped leaves held in a V. Many have beautiful white skin with or without teeth on the leaf margins. Most have big yellow or white flowers in profusion during the winter, opening in afternoon sunshine and greeting you upon arrival home. They come from areas of southwestern Africa with no rain during warm weather but reliable light rains in the winter. They sleep during the summer and cannot tolerate water while dormant, so you can just put the pot in a mostly shady spot or inside on a windowsill and forget about the plant. Don't water until nights are definitely cool. In the winter here the soil should be kept moist all the time. They want full sun in the winter. Different species tolerate frost from 28 F to 20 F, so most don't need winter protection here. Most people lose their Cheiros in August when they water, which is unnecessary. They are very easy from seed, or cuttings taken during the growing season and kept moist. I do mean moist. One cutting I have with three branches and six leaves total sucks a three inch clay pot dry each day. An exception to the general culture is C. denticulata, previously called C. candidissima. It takes full Arizona sun and frost all day long, all year long, and needs watering all year as well. I think it would make a great landscape plant but I'm afraid to rabbit-test it.

Ruschia was named after plant explorer Ernst Rusch. They are shrubs, some quite large. Stems are clothed with opposing pairs of leaves. They tolerate full Arizona sun and frost all year, and like water all year. Most grow fall-winter-spring and flower late winter to spring. Some have homely flowers, but others put on a spectacular show. They should also make good landscape shrubs. They are easy from seed sown fall or spring and from cuttings taken fall or spring.

Schwantesia was named after German botanist and student of mesembs Schwantes. They grow in both winter and summer rainfall areas along the Orange River, which forms the boundary between South Africa and Namibia in southwestern Africa. They have beautiful leaves, normally two opposed pairs, often white skinned and nubby, narrower and laxer than Cerochlamys. Flowers are bright yellow during the winter growing season.

All mesembs love sun and water during periods of active growth, and fresh air at all times. Bijlia, Cerochlamys, Ruschia and Schwantesia have similar needs. They are opportunistic growers, resting during the heat of the summer and the coldest weeks of the winter, and growing when nights are below about 60 F and days above 55 F. They can be watered all winter. These are mesembs that won't die if you occasionally forget and water during summer dormancy, the way Cheiridopsis may; in fact, I water these three about once every 2-3 weeks during the summer to prevent the roots from dying completely in our heat, and keep them in at least half shade (except for sun-loving

Ruschia.) They will tolerate much more sun but will look bad by the fall. The books say they must be kept quite dry. In our climate, this is incorrect in the winter; remember the books were intended primarily for people with greenhouses, who have dank, stagnant, artificially heated atmospheres in the winter! I use soil from the wash next to my property; none of these have any organic material in the soil in habitat. I have not had any pest problems with plants kept outside, though birds will peck and mar the leaves.

All six of these genera are easy from seed sown in the fall or winter, or cuttings taken during active growth and kept moist. Some Cephalophyllum may take years to bloom from seed, though the other genera usually bloom within 2-3 seasons after sowing.