

Lithops (N. E. Brown)

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Nicholas Edward Brown first separated Lithops (stone plant) from Mesembryanthemum as a genus. They had amazed Europeans since the late 1700s for their resemblance to stones. They are stem less, sometimes clustering, top-shaped paired-leaf plants whose flat leaf tops are normally at soil level, formally separated from Conophytum by the absence of bracts on the flower stems, though only by cutting into the plant would this be noticed. Flowers are white or yellow, and open when the sun shines.

Lithops are found primarily in southwest Africa with predominately late summer to early winter rains. During the rainy season, it may rain almost daily. Then they may go eight months without rain. They grow mostly in flat areas among pebbles. They are almost impossible to find in habitat unless flowering as during the dry season plants shrink below ground, and sand blows into the depression, so areas must be swept to reveal the plants beneath the dust.

According to Schwantes, *L. pseudotruncatella* easily tolerates 15 degrees F in the winter if it is shriveled. Rusch reported leaf temperatures of 56C (133 F) at noon on a sunny day. On the other hand, Steve Hammer has told me *L. optica forma rubra* grows very close to the coast and probably never gets above 75 F in habitat. Whatever the temperature, they grow in full sun, and soon elongate with shade.

Many people prefer growing them in deep pots, allowing formation of an extensive root system, in a mainly mineral soil. They are potted higher than natural in cultivation to protect against rot. Flowering starts in fall, with different species following the same order year after year. The flower is like a flag saying, "Stop watering me." After flowering, the plants will shrivel somewhat. With the approach of summer, the new pair of leaves will split the old ones. Don't water yet! Wait until the old pair of leaves is dry like paper, then soak once. Drench the soil. After that, wait until the soil is dry before watering again. Many people use very weak fertilizer during the summer watering period; others don't fertilize. One person from Canada wrote to the online cacti_etc discussion group, that he waters his Lithops only TWICE yearly, once in the spring after old leaves are resorbed, and once in the fall just before flowering. He has plants decades old.

Birds are a problem. They like to peck at the soft bodies. Protect your plants.

They are easy from seed; in fact, easier than buying plants, because they are adapted to one's growing conditions from birth. My experience is that ALL store-bought Lithops have mealy bugs, and your seed-grown plants probably don't. Multiple bodies can also be separated and potted up; this is probably best accomplished when it's warm and new growth is complete.