

West Coast Plant Guy

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Lithops Care Sheet

History:

Lithops are a neat little plant, native to South Africa, that closely resembles a pile of stones. They are actually Succulents from the Mesembryanthemaceae family. Lithos is Greek for the word stone and Ops means like, hence their common name Living Stones. Lithlops are very easy to grow and when they are on display, create a great deal of interest. Plus they have spectacular yellow or white daisy like flowers, 2.5 to 3.5 cm in diameter that magically arise from the center of the living stones.

Individual plants usually have two bulbous, almost fused leaves opposite to each other and hardly any stem. The slit between the leaves contains the meristem and produces flowers and new leaves. Old leaves die after the new pair has emerged.

The leaves of the Lithops are transparent. These leaves, or “windows” contain calcium oxalate crystals that diffuse onto the area that is being photosynthesized in the Lithop. This helps the plant absorb lots of sunlight even in minimum exposure. Occasionally two new pairs emerge, couple this with the naturally accruing runner pups and plants can eventually form large clumps. The plant is almost entirely buried in soil only exposing the flat upper surfaces of leaves. This is an adaptation to the dry, hot environment

Plants form twin-headed or smallish clumps. Stone shaped, 4-5cm in diameter with a fissure across the middle. Colors range from grey, brown or olive green with darker blotches.

Lithops thrive best in coarse, sandy substrate. They love rather shallow but comparatively wide pots, where the substrate does not become wet and clammy in the deep part easily; under such conditions, they will over the years grow to form large clumps.

Watering:

The books will tell you that Lithops will “do best being watered about once every two weeks. Tap water or distilled water is fine. Humidity is not required for this plant. Treat it as a cactus.” (That is not the case where we live, it is way to hot and dry here to let even our potted cactus go that long without water. As stated before, use your best judgment.)

Be sure not to over water, too much water in the summer, especially in the hottest part of the day (our summer temps are regularly in the low hundred's and occasionally reach 110 – 118 range for days at a time) will cause to much moisture to build up in the pot and virtually “Boil” your roots. The plant can take a 'misting' every other day if desired, but not required. In best conditions Lithops will take up all the water that is put in the pot causing the plant will swell and split.

Light:

Lighting is just as easy. The Lithops can take full strength sun. No shade is required. However...if doing so be sure to water every week (instead of every other). I have found that light conditions do mess with the color somewhat.

For indoors - A window sill with any direction light will do. Too much light is not a problem. Too little light is. You know when the plant is not getting enough light when it appears to be 'reaching' for it. Meaning it will lose its rock like appearance and grow taller. If this is noticed, simply find another place with more light.

Temperatures:

The Lithops will do fine in just about any temperature, they are naturally found in the desert of South Africa. The plant will do fine with temps in the upper 90's (Fahrenheit) to 100 degrees. On the other side of the scale do not allow your Lithops to freeze. It will do fine in temperatures in the upper 40's and greater. If it freezes it will die.

Fertilizer:

Fertilizer is a requirement that is of some debate with growers. To play it safe we use a diluted solution of Miracle Grow but any decent water soluble 20-20-20 plant food mixed at about 1/4 strength will be fine about once a month during the growth season. After the plant flowers in late Fall/early Winter (see special notes) no fertilizer should be applied to the plant until after the new growth comes in.

Soil:

The soil mix for this plant will vary from person to person. Lithops thrive best in coarse, sandy substrate. The best mix we found to be a 40% mixture of commercial cactus mix (this has the sand and organics necessary for growth) and 60% small secreted pumice and/or decomposed granite to allow drainage. (We do not use perlite) We use a drainage layer in the bottom of the pot to allow excess water to drain (for fear of plant swelling). So a loose soil is best

Growth:

The growth cycle of the Lithops is quite unique. There are basically 3 stages. The plant has no noticeable dormancy period. In the Fall or early Winter the Lithops will shoot a flower up between the leaves. It will look like a small daisy (most lithlops are yellow and white).

After the flower dies off ALL WATERING/FERTILIZING SHOULD BE STOPPED!

It is at this point the plant will rest a short time. Then from the middle again two new leaves will start to form. They will take all the moisture and nutrients from the old leaf. This is why it is important not to water/fertilize, it will disrupt the process. The old leaves will shrivel up and die and the new ones will come in and replace the old. At that point it is safe to resume watering/fertilizing.

Reproduction:

Lithops reproduce by a runner (a pup type 'root' that will spread out come up near the parent.) The and of course they reproduce is by seed.

Important Notes; OK so what have we learned?

- 1) **Never over water your plant.** ONLY Bad Things can happen! It will rot the roots, boil the roots or It will swell and sometimes split. NOTE: If this happens special chemicals will need to be applied so that bacteria does not enter the plant and cause it to die.
- 2) **Do not allow your plant to freeze.** The Lithops can take a wide spectrum of temperatures above 40 degrees. SO, you east coast guys need to move them inside the house or into a heated hothouse.
- 3) **Do not water or fertilize your plant when it is producing new leaves.** This will disrupt the growth process and may damage or kill your plant.