

## **CARING FOR YOUR NON-HARDY SUCCULENT DISH GARDEN**

Many **SUCCULENTS** (most cacti plus many, many other plants adapted to survive dry periods and/or live in desert environments) are easy to grow if you give them somewhat desert-like growing conditions, which include the right **SOIL, LIGHT, WATERING, and REST**. When I make a dish garden I try to put plants together that can grow in similar conditions. Succulents are easier to group that way than cacti mixed with other succulents, but it is possible to keep a dish garden healthy and happy for several years if you are careful.

**PLANTS:** Plants I like to use in dish gardens include small specimens and cuttings of the following:

- **CACTI.** Small species of mammillaria, notocactus, gymnocalycium, some opuntias, lobivias (not an exhaustive list). Avoid echinocereus species, *large* opuntias (prickly pears), and cacti that have tuberous roots.
- **Other SUCCULENTS.** Crassulas (mini-jade, Pagoda, perforata, watch-chain, et al), Sedums (non-hardy types from Mexico), Mesembranthemums (some look like trees, others are short and lumpy), small Aloes, Sansevieria (kin to mother-in-law's tongue but small and succulent), Haworthias, succulent Wandering Jew (tiny leaves), et al. These plants give a variety of shapes and can make what looks like a miniature desert landscape with the right stones and accessories. Some may bloom, but don't sulk if they don't. Growing in a dish garden is not the optimum for most and is a bit stressful from the plant's point of view. If one of the dish garden plants gets too big for its surroundings, remove it carefully and pot it by itself, and replace it with a smaller specimen.

**TOOLS:** An old spoon (for cultivating and for initial watering), a spray bottle of water with a mist setting, your water-sensitive index finger, and a container from which to pour water gently. Nothing very high tech!

**SOIL:** Most need porous soil that drains easily, a mix of small gravel, coarse sand, compost or topsoil, even some potting soil, perhaps some perlite – crumbly not clay-ey in feel. Avoid soil containing peat unless you are growing Christmas cacti. Many purchased succulents are grown in soil high in peat, because it holds moisture for the shipping. I usually rinse off this soil and let the roots air dry before putting them in a dish garden. When cacti are transplanted they are NOT to be watered immediately or roots could rot, they are that sensitive to traces of water in the soil. So when I put cacti in a dish garden, I wait a day or two before watering; the other succulents do just fine this way.

**LIGHT:** While many succulents, including cacti, grow in full sun out in nature, in artificial (potted) growing conditions, many need some protection from full sun, especially in New Mexico and other parts of the sunny Southwest.

*--Thou shalt provide **strong indirect light** for a dish garden and rotate it periodically so the plants don't lean. Not enough light and they elongate (etiolate) and get weak and spindly. This condition is pretty much irreversible. Too much direct light and they can sunburn and shrivel. The average succulent dish garden needs more light than your average tropical foliage plant, much more.*

Haworthias and some Crassulas can take less light than most cacti, for instance.

**TEMPERATURE:** Most succulents I use for dish gardens are indoor plants. This means they are not frost hardy and some don't like to get below 45 degrees. Many of the hardy ones don't like growing in pots.

*--Thou shalt not let the temperature of the air around a succulent dish garden fall below about 50 degrees Fahrenheit, neither shalt thou let it broil! (Watch that a dish garden in a window next to the glass doesn't get too chilled in winter.)*

You can put a succulent dish garden outside in summer months, but give it a bit of protection from sprinklers, pounding rain, excessive sun, and violent wind. They make nice accents on porches and patios and other outdoor settings. Some may even reward you with blooms.

**FEEDING:** That's easy, *DON'T!* Don't fertilize succulent plants in dish gardens, as you don't want them to outgrow the containers. *NEVER* give high nitrogen fertilizer to cacti and other succulents. Their metabolisms don't like too much nitrogen.

**WATERING:** Carefully check the bottom of the dish to see if it has a drainage hole. That will make a difference in the amount of water you give, because the general rule for cacti and other succulents is that they need water to reach the root system and then drain away.

*--Thou shalt **not ever** let a succulent in a pot or a dish stand in a saucer of water. Water it and then pour off any excess that drains into the saucer. If the dish does NOT have drainage, you will water less.*

*--Thou shalt not water until the soil feels dry after the last watering.*

The following schedule usually works for dish gardens with drainage:

- Using a spray bottle, **MIST** weekly all **year around**. Do this in daytime not at night when temperatures fall.
- In **summer** water the soil from the top about once a week, but not till it dries between waterings. Since dish gardens usually have smaller drainage holes than regular pots, the amount of water depends somewhat on the top surface area of the soil and the number of plants crowded into the pot. Put about one (1) tablespoon (Tbsp) of water per plant. For a large dish garden with plump plants each 3 inches across or more, use about 1/4 cup of water per plant. Don't be afraid to experiment. If the garden is drying out in a couple of days, try upping the amount of water. After trial and error you can visually judge how big a "splash" of water to give without actually measuring it. Your confidence will grow or you'll have killed the plants. Either way, it's a learning experience.
- In **winter**, most cacti and succulents need a **REST**, when they receive little or no water on the roots. This mimics the dry season in their native environment. Often they will not bloom if they don't rest. If you have cacti in your dish garden, give them this dormancy and mist as noted, but lightly. If you have Crassula or Sedums in your dish garden, they are winter bloomers and would like an occasional drink of water in winter, but not as much as in summer. Crassulas and Sedums are akin to Jades (*Crassula argentea*), but many are available that have smaller leaves and interesting forms and stay rather small, so I use them a lot in dish gardens. If they are going to bloom, it is usually in fall or winter with clusters of little white to pink flowers. Most small dish garden cacti are spring or summer bloomers. Aloes are pretty forgiving as far as winter watering. They may change color (from greener to redder leaves) and get skinnier when watering is decreased, but that is a natural state of affairs.

**PS: It is perfectly okay to talk to your plants**, just bend low enough so the carbon dioxide in your breath flows over them, but not so low you impact cactus spines with your lip. Some of the succulents do most of their food-making at night (and that's when they open the "pores" in their leaf surfaces), so whisper sweet nothings to your Crassulas and Sedums after dark. And don't let the neighbors overhear – they might not understand!