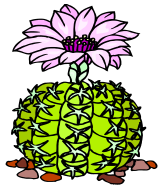
Now that I've got it, what do I do with it?

Some Tips on Caring for Cacti & Succulents



LIGHT: While most succulents require bright light to grow well, some are susceptible to sunburn. If you plan to place a plant in full sunlight, do it gradually to give it a chance to adjust. Even so, you may want to shield it from harsh late afternoon sun. On the other hand, giving your plants too little light will cause them to become long and spindly or to lean strongly in one direction instead of growing straight.

AIR: Good air circulation is essential, especially if you grow your plants indoors or in a greenhouse. A simple oscillating fan will keep the air moving and discourage pests from settling.

TEMPERATURE: This can vary considerably, depending on whether the plant is actively growing or dormant. When dormant, most plants can be kept at temperatures from 40˚-50˚F; some can tolerate even lower temperatures if kept dry. Others are extremely frost tender and do best if brought indoors or placed in a heated greenhouse during the winter. In the long run, your best bet is to research the specific needs of your plants and treat them accordingly. There are many helpful books and websites available.

WATER: Over watering kills more succulents than anything else. Frequency depends on the type of soil mix, the kind of pot (clay or plastic) and the size, and the time of year. During the growing season—generally spring through early autumn— water thoroughly so that some runs out the bottom of the pot. This keeps salts from accumulating in the soil. Never let your plant sit in water. There is no absolute formula as to how often; as a rule, it's best to let the soil become almost dry between watering. A moisture meter can be useful. In late fall when many plants are becoming dormant, water lightly and less often. However, allowing plants to become too dry for too long can cause roots to die, so an occasional light watering in winter can help, just don't soak the soil. See reverse for more on watering.

SOIL: The best soil for succulents is light and drains quickly. A very effective mixture is one consisting of a good potting soil (preferably one with no peat) mixed half-and-half with Perlite or pumice. Essentially, you want to avoid any soil mix that is heavy and stays soggy for a long time. One choice would be Kellogg's Palm & Cactus, available at Lowe's.

FERTILIZER: Succulents should only be fertilized when they are actively growing. Best results will be obtaining by using a balanced fertilizer containing micronutrients (check the label). It's best to fertilize frequently using ½ or even less than the recommended dosage. Several good choices are Miracle Gro˚, Techni-Gro˚ and Dyna-Gro˚.

PESTS: Mealy bugs, scale and red spider mites are the more common pests that attack succulents. Fortunately, they can generally be well controlled by using a systemic pesticide. Whatever you choose to use, be sure to read the directions carefully and use as directed! Never use a larger dose than the manufacturer recommends.

POTS: Always use a pot with a good drainage hole covered with a pot shard, rock, screening or even newspaper. The important thing is to let the water out while keeping the soil in! Both clay (terra cotta) and plastic are good; however, clay pots "breathe" and allow the plant to dry out quicker so you would be less likely to run into problems caused by soggy soil. As a general rule, allow a thumb's width between the cactus and the edge of the pot. Resist the urge to plant a small cactus in a large pot; it will do much better in a small pot than one that is too large.

RESOURCES: Since there are so many varieties of cacti and succulents, it's very hard to generalize about their care. Fortunately, there are many excellent books available (RainbowGardensBookshop.com has a great selection), plus the internet is a fantastic resource. Best of all, contact your local cactus and succulent society! You'll meet fellow enthusiasts and learn more about raising these fascinating plants.

This is from the April 2009 issue of the Carmichael C&S Society newsletter. The information was presented in a talk for our Club by Elton Roberts, a well known and highly respected grower of cactus and succulents, and also one of our vendors.

WATER, WATER, EVERYWHERE No, not a discussion of rain, or lack of it.

Obviously Elton hit a nerve last month with his presentation on watering.....he sold every last one of the pH kits he brought. Now the question is.....are you using yours? I've been using mine and the results were surprising. For several years now, I've used vinegar water (basic formula of 1 TBS. white vinegar to 5 gallons of water) and have been pleased with the results. But, I've never tested it to see if that amount was sufficient. Well, apparently, the water in my neighborhood is truly dreadful, off the charts in terms of being alkaline. The first sample turned a lovely shade of green. It wasn't until I tripled the amount of vinegar that the pH got into the "good" (acidic) range. Remembering Elton's admonition to not overdo the vinegar for fear of burning off the roots, I dashed off a frantic e-mail to him asking for advice (not the first time I've done this!) Bless him, he got right back to me and assured me that the amount was not excessive, that some people have to use considerably more than that to bring down their pH.

Elton's second recommendation was to also add ammonium sulfate to your water, at the rate of 1/2 cup to 30 gallons of water. Since the ammonium sulfate could possibly change the pH a bit, he suggests that you add it to the water first, test for pH level, and then add as much vinegar as needed to take it down to about 5, which is in the orange area on the chart.

The rationale for adding the ammonium sulfate is that it provides nitrogen in a form that your plants can readily utilize. The types of nitrogen found in most fertilizers need bacteria in the soil to break them down, and also require that the soil stay wet for quite a while for this to happen. Not a good situation for cacti and succulents!

Elton shared some comments from Steven Brack of Mesa Gardens: "I have played around with various fertilizers and other additives and they at best are a tiny improvement. The vinegar was a good step, the plants were very happy. But the ammonium sulfate with vinegar, well that is party time. All sorts of cacti and succulents are going nuts, I can't begin to mention how everything is really moving." He goes on to mention some areas where you need to be cautious, such as with Crassulas—they really respond to this, so go easy with the water—and Lithops—just a splash of the vinegar/ammonium sulfate water is enough for them, as they absorb the chemicals through their skin.

Summary:

- Test the pH every time you water
- To acidify your water, you can use almost any kind of acid...vinegar, citric acid, battery acid, sulfuric acid...but not swimming pool acid which is chlorine, and you don't want that at all.
- If you choose to use vinegar, it should be white vinegar, 5% acidity (check the label)
- Ammonium sulfate is readily available at nurseries and garden centers and is relatively inexpensive (about $10 for a 20 lb. bag at Emigh Hardware)
- You can use your regular fertilizer (one with micronutrients) with the above water mixture but use less than the recommended amount of fertilizer.
- You can do all of the above: vinegar water, ammonium sulfate, lower dose of regular fertilizer every time you water.
