

## CARE INSTRUCTIONS FOR CACTI & RELATED PLANTS (<http://cactusstore.com/>)

Care guidelines vary greatly upon the specific conditions in your garden. The instructions for care in a hot dry environment like Phoenix is much different than the care instructions in a cool, damp location. Generally, cacti and succulents like to be kept dry, warm and bright. Cacti are very tolerant of less than ideal circumstances, but better conditions derive better results.

**Planting Bare Root Cacti:** Upon receiving your plants, open boxes as soon as possible. If any damaged roots are observed, trim with clean scissors before planting. Keep the new plants somewhat dry until new roots start forming. This can take a few days if hot or weeks or longer if cool or the plants dormant. During the shipping process, some plants may become de-acclimated from their normal full sun environment, and could burn if they are exposed too soon to extremely hot sun.

**Planting (unrooted) Cuttings:** When you receive your **cutting**, allow it to dry 10 to 45 days before planting. (Thick cuts and cool weather require a longer drying period). To dry the wounds, leave the cutting in a shady, warm exposure, not direct sun. Then plant it in DRY cactus potting soil and do not water for another 10 - 45 days. After the cutting develops a root system it is safe to start a light regular watering cycle. Always let the soil dry out completely between applications of water. It is MUCH more likely that a cutting will be killed by over watering than under watering.

**Watering:** It is difficult to provide precise rules pertaining to the watering of cacti and succulents. Cacti should not be watered during their period of dormancy, which occurs during the winter months. During winter, keep cacti dry, especially if kept in an environment with a fairly low temperature. **Cacti must be watered during their active periods.** A typical watering schedule might be (if protected from rain): once in Jan, once in Feb, twice in March and 2 to 4 times monthly during the growing season. Enough water should be given to soak all the soil in the pot. Excess water should drain freely. During summer, occasional rain showers will do no harm. Plants prefer rain to tap water. During a protracted period of rain, however, cacti should be placed in a sheltered area. Technically, water should be free of chlorine and alkaline salts, but ordinary tap water will suffice. Chlorinated water and hard water will leave white stains on the cacti, which is unsightly and does block the stomata. (Pores)

**Nutrients:** Cacti and Succulents need regular feeding during their growing season (Spring-Summer). They need a balanced range of minerals. Potassium (K) to encourage flowers and fruit, Phosphorus (P) for good root growth, and Nitrogen (N) for vigorous top-growth. Cacti also need other trace elements. Any commercial houseplant fertilizer will do, but an ideal ratio of nutrients is: 20% nitrogen, 20% potassium, 20% phosphorus, and all of the other trace elements.

**Light :** Mature cacti and succulents grow well in a warm climate at a minimum temperature of 61F (16C). Cacti usually need direct or filtered sunlight to perform photosynthesis. Natural light can be supplemented by an artificial light source such as fluorescent lighting.

**Soil Mixture:** Cacti have adapted to survive in rocky, sandy, or clay based soils, with limited nutrients. However, the ideal soil or potting mixture will drain rapidly and yet retain some moisture. Always use a gritty mixture, pumice or perlite mixed with commercial potting soil is good. Most cacti prefer a slightly acidic soil.

**Pots and Containers:** Succulents and cacti do not require a great depth of soil. Make sure that all containers have drainage holes. Line the bottoms with material such as pottery shards or gravel before adding soil. When growing plants together in one container, select plants with similar cultural needs and growing seasons. Many slow-growing succulents do well when planted with desert cacti, but can be swamped by fast-growing succulents. The care guidelines vary greatly upon the specific conditions in your garden.

**Pest and Diseases:** Cacti do resist pests and diseases, but can fall victim to mealy bug and scale as well as numerous bacterial, fungal and viral attacks. The remedy for scale and mealy bugs are numerous, but I find malathion and/or Orthene with a wetting agent to be very effective. Regards to fungal and viral attacks, prevention is the best remedy. That is provide good growing conditions (dry, warm) and let the plants do the rest..