

Home Grounds Fact Sheet

Cacti and Other Succulents

All cacti are succulents but not all succulents are cacti. Other than cactus, members of various plant families and genera belong in the succulent category. *Euphorbia*, *Aloe*, *Sedum*, *Hoya*, *Kalanchoe*, *Sansevieria* and *Haworthia* are only some of them. All cacti are native to North and South America, with the exception of the *Rhipsalis*, which are native to Africa.

Succulents are so-called because they have fleshy, water-storing stems and/or leaves which enable them to use what water they do get, very efficiently. Cactus have a very different water retaining characteristic; they have spines instead of leaves. These spines emanate from cushiony areoles and while cactus spines are in clusters of three or more, the cactus-like *Euphorbias* have solitary spines or spines in pairs.

Culture

Many succulents, particularly cacti, are native to the desert so they are ideally suited to be houseplants in our warm, low humidity homes. A pot, preferably clay, with drainage holes, and a potting mixture of 1 part garden soil, 1 part coarse builders sand, and 1 part peat moss should be used for cactus. Epiphytic succulents, (orchids, Easter, Thanksgiving and Christmas Cacti), require a different potting mixture, one with more organic material such as sphagnum moss. Most succulents prefer a slightly acid soil. A pH of 6.0-6.9 is ideal. Over-watering is the principal reason for failure in growing these plants and a well-drained soil is essential.

The amount of water needed for growing cacti and succulents depends on several factors: 1] time of year, 2] size of plants, 3] type of potting mixture, and 4] the size of the pot. During their active growing

season, March thru September, cacti and succulents should be watered thoroughly and allowed to dry between waterings. Wait until the top 1/2 inch of soil is dry before watering again. Most succulents, particularly cacti, are in their dormant season from October thru February, and require almost no water during this time. During the active growing season, a monthly feeding of 15-30-15 is advisable, a high nitrogen fertilizer would promote soft, flabby growth. **Never feed during the winter dormancy.**

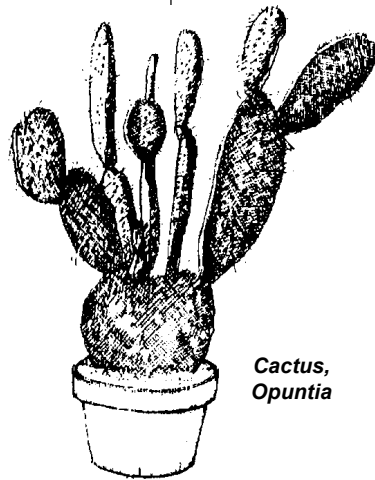
The average daytime house temperature is suitable for growing most cacti and succulents and they can easily tolerate a nighttime temperature range of 45-60°F. A south or western exposure is preferred.

However, there are a few that will thrive under artificial light. In the summertime most cacti and succulents can go outdoors but be sure that the taller varieties are protected from wind damage. As with any plant, when cacti are placed outdoors, start them in the shade and gradually increase exposure to the sun in order to prevent sunburn.

Propagation

Most cacti and succulents can easily be propagated by seed, division and grafting. Cuttings should be allowed to dry for several days before repotting. Builders sand and perlite can be used as a starting medium. While rooting, the cuttings should be watered and kept in indirect light. After rooting occurs, pot the plants in a suitable container.

Every two years, in the early spring, before new growth begins, slip the plant out of the pot to see if it is potbound. If you find that it is potbound, repot using fresh soil and increasing the pot size by 1 inch only.



Cactus,
Opuntia

Decorative Uses

Several varieties of cacti/succulents can be grown successfully in a single container. Choose plants of varying heights and textures making sure that their active growing periods coincide. Any container can be used and many attractive scenes can be made using widely divergent shapes found within the cacti/succulent families.

Plant Problems

Integrated Pest Management (IPM)

Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce plant problems. These include using resistant plant varieties, proper plant selection and placement, good aftercare and biological and/or mechanical controls. As a last resort, after all other remedies have been explored, a pesticide* that is least toxic to people and natural predators, can be considered. Prior to using any pesticides, plants should always be monitored for the degree of infestation and a sensible control measure considered.

* A pesticide is a substance that kills, or attempts to kill, a particular pest, e.g. **insecticide**, **fungicide**, **herbicide**, etc.

Insects

The insect pests attacking cacti are spider mites and mealybugs. They can be controlled by using rubbing alcohol applied with a cotton swab, or insecticidal soap. Be sure to read the directions on the insecticidal soap. It may cause problems for some succulents. Spray only when and where an infestation appears and not as a preventive measure.

Diseases

Black stem rot which is caused by overwatering is the only disease affecting these plants.

Recommended Reading

- **The Time-Life Encyclopedia of Gardening - Cacti and Succulents** by Philip Perl.
Time-Life Books, Alexandria, Virginia. 1978.
- **The World of Cactus and Succulents.**
Ortho Books, Chevron Chemical Co., 575 Market St., San Francisco, CA 94105. 1977.



Cactus,
Peruvian

"This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office (631) 444-0340. Read the label before applying any pesticide. Cornell Cooperative Extension and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products is made or implied."