Cacti & Succulents: A Summary Of Cultural Requirements

Fascinating plants of widely varied appearance, from many different families, from high and low altitudes around the world, and growing from sea-level to ten thousand feet or more, cacti and other succulents all have one thing in common; they have evolved into drought-resistant forms capable of surviving in climates of intermittent or uncertain rainfall; in rocky or sandy locations where scant topsoil holds insufficient moisture to support plants from one rain to the next, and even in trees. Over thousands of years, leaves, stems or roots have become enlarged, due to the selective pressure of a drying trend in the climate, and are able to store water for extended periods, sometimes years. Conversely, they are seldom found in places where water stands for any length of time, but have a marked preference for well-drained sites, such as alluvial fans in the desert, where the soil is coarse and gritty. The majority of succulent plants also come from warm to hot-climate countries, with an abundance of sunshine during most months of the year.

All of these facts combined, then, furnish strong clues about their optimum cultural requirements. Although they are more tolerant of neglect than most other plants, and have a great capacity for survival under poor conditions, they will amply repay attention to a few basic points.

LIGHT

Apart from shade-loving woodland plants such as Christmas Cactus or Orchid Cactus, most succulents need as much light as possible, and when well established will be more robust, of a better color, and flower more freely, when exposed to full sun. They will tolerate less light, but will be a paler green, and less inclined to flower well.

TEMPERATURE

During the growing season, temperature and light can be considered together; those plants requiring some shade usually preferring somewhat lower temperatures. During winter, most succulents survive well with a nighttime low of 40 degrees F and daytime temperatures in the 60's. Many, particularly those from mountainous regions, will withstand much greater cold, even actual freezing, so long as they are fairly dry, and often flower much more freely as a result. This group can be grown successfully in unheated greenhouses in most of California, or planted out as permanent landscape features, providing that attention is paid to supplying good drainage. On the other end of the scale are plants from low desert and coastal areas, such as stemless Mesembryanthemums and Melocactus, which prefer a winter minimum of about 60 degrees F.

SOIL

Whether being grown in containers or in the ground, the growing medium should always be well-drained. Many mixtures will work, including soil-free mixes, provided that there is sufficient coarse material such as grit, lava rock, or perlite present to enable surplus water to drain away quickly. When wet, an ideal soil mix would contain 50% solids, 25% liquids, and 25% gases. Repotting into fresh mix and/or a larger container should be done annually for young plants, less often for slower growers and larger specimens. Best times are spring or fall.

WATER

Like all other plants, cacti and succulents will only grow and bloom well with ample water during the growing season. This varies from daily for small pots in full sun, to once or twice a week for plants in larger containers receiving some shade, or in the ground. As a rule, leafy kinds need more water than swollen-stem kinds. In the winter, or their resting period, watering should be limited to only an amount sufficient to prevent shriveling. Thin-leaf succulents and Epiphyllums are exceptions and should be kept moist year round.

AIR

As important to plant growth as water, air should always be in good supply and freely circulating, in order to provide the plants with oxygen and carbon dioxide for growth, as well as discouraging pests and diseases, which thrive in conditions of high humidity.

FEEDING

Once the nutrients in a container soil mix have been depleted, supplemental feeding will be required. This can either take the form of once or twice-annual applications of a slow-release food such as Osmocote, or monthly with a weak solution of a liquid fertilizer like Schultz-Instant, Rapid Gro or Miracle-Gro. In addition, fall feeding with a 0-10-10 liquid fertilizer improves winter hardiness, flowering and fruiting.

PESTS AND DISEASES

On the whole, most succulents and cacti stay fairly free of problems, but outbreaks do occur. Insects such as aphids, mealy bug, scale, or spider mite can often be controlled by washing with a jet of water, or failing that by spraying with Safer Soap. Should neither remedy work, various organic insecticides are available, or as a last resort, use Malathion or Orthene. Fungal attacks usually respond to spraying with fungicides such

as Bravado, Eagle, or Neem Oil. Large cuts made during propagation or to remove infected areas should be treated with Flowers of Sulphur or another appropriate fungicide as a preventive measure.

RECOMMENDED REFERENCES:

Succulents for the Contemporary Garden
by Yvonne Cave, 2003
ISBN 088192573X

Sunset Western Garden Book, 2001
ISBN 0376038756

The World of Cactus & Succulents
Ortho Books, 1977
ISBN 0917102592

Hortus Third, A Concise Dictionary of Plants Cultivated in the U.S. and Canada, November 1976
ISBN 0025054708

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