Garden Mastery Tips
from Clark County Master Gardeners

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Orchids

Orchids evoke imagery of steamy tropical rain forests. Orchids have exotic shapes, scents, colors, textures, flower forms and plant conformations. The orchid family (Orchidaceae) is one of the most genetically complex and geographically diverse groups of plants in existence. Orchids belong to 800 different genera, with more then 25,000 species and in excess of 110,000 man-made hybrids.

Orchids are not as hard to grow as many people seem to think. You can have beautiful orchids that require little more care and attention than house plants. Unusual species variations and modern hybrids are available at relatively little cost. Most hybrids have been created to respond well in the home environment. If you have always wanted an orchid, ground yourself with a little study and take the leap.

Like any other plant, orchids require light, correct temperature range, humidity, water and fertilization. It is important to select the varieties that are suitable to your particular locale. Local growers have expertise in collecting and cultivating orchids and will be able to offer recommendations based on Pacific Northwest growing conditions (low winter light levels). A little time spent in on-line research with the various orchid societies and specialty nurseries will add to these general guidelines.

Orchid Environment – Light

In nature, most orchids grow in very bright locations, protected from constant exposure to intense sunlight. In the Pacific Northwest, natural winter sunlight is rarely sufficient to produce blooms on orchids, so look for varieties that can thrive on low levels of winter light.

Windowsills are often a good place to grow orchids, provided there is little or no direct sun on the plants. East and west facing windows usually provide moderate light. Southern light is good during our winters but should be shaded in the summer, when the late afternoon sun can burn plants.

Most orchids require at least six hours of light a day. Artificial light can be used to supplement the available natural light. Fluorescent lights are easy to use, energy efficient, and they give off relatively little heat. Full spectrum fluorescent lights emit light that closely approximates natural sunlight. Incandescent light bulbs used in conjunction with fluorescent fixtures increase the red rays that boost flowering. When using incandescent light, position the light far enough from the plant to compensate for heat production. A light timer is an easy way to control the amount of artificial light.

There are also mercury vapors, high-pressure sodium, and quartz lamps that are much brighter than fluorescent lamps. However, they are much more expensive to purchase and maintain.

Single plants will do well with a desk lamp or clip–on fixture. With a grouping of several plants try using shop light fixtures. There are also ready–made light gardens for orchids. A simple unit consists of a fixture and frame that is designed to light a small table or shelf. For larger collections there are multi-tiered stands and carts with built-in humidity trays and fluorescent lights. A do–it–yourselfer can build a simple light garden. Good lighting will ensure profuse blooming.

Temperature Requirements

Orchid growers divide temperature needs of plants into three categories; warm, intermediate and cool. These groupings refer to the lowest temperature in which an orchid will grow during winter nights. Orchids are very adaptable and thrive in a wide range of temperatures. Many plants will do well in two or three categories. Most orchids will be comfortable where you are comfortable, as they prefer an intermediate temperature range. The typical home environment has a temperature range of about 70–75° F. during the day and 55–60°F. at night. A 10–15°F. nocturnal drop is as important as the dark period. Some orchids will grow healthy foliage but refuse to flower without this nighttime fluctuation. The cooler nighttime temperatures allow the plant to store the carbohydrates they need to produce blooms.

Do not allow orchids to touch the window. Plants immediately adjacent to a window should be protected from sudden or extreme temperature changes. To grow plants requiring warmer temperatures use infrared lights, heating cables or space heaters. A maximum–minimum thermometer will help determine correct temperature ranges. Of course, a simple thermometer will do the job.

Humidity and Air Flow

In their natural environment orchids are continuously bathed by fresh air and they primarily survive by absorbing moisture from the atmosphere. In the home, it may be necessary to introduce simple modifications to duplicate the orchid’s natural habitat. Orchids need a relative humidity of at least 50 percent or more.

To increase the plant’s surrounding humidity, create a micro climate by placing the plant on pebbles in a tray of water. Keep the water level below the top of the pebbles. A humidifier, table top fountain or misting unit may also be used. Add a ceiling, table top, clip-on or standing fan to gently move the air.

Watering Wisdom

Most orchids have roots designed to be exposed to air. Their roots also require a drying out period. Due to their many variables, orchids do not lend themselves to a proscribed watering frequency. Start with a weekly watering schedule. Be consistent and observe your plants to make sure the watering regimen is working.

To water, use a sink or bath tub and run water through the planting medium until it is drenched. In general, water a little more often in the summer and cut back slightly in the winter.

Water treated by a water softener is not suitable for growing plants. Rainwater or water with a low mineral content will yield the best growing results. Or use room temperature tap water that has been sitting for a few days.

A Few Final Concerns

Feed your orchids on a regular basis, but use a lower dose of approximately one quarter strength with a fertilizer appropriate to the potting mix. Fertilize less often during the winter. Periodically flush the potting medium to remove excess salts.

As with all house plants, occasional pests and disease occur. Routine cleaning of the leaves with soap and water will remove most insects. Insecticides should be avoided unless the infestation is persistent.

Most orchid problems are caused by over watering and poor drainage. Healthy growing conditions and careful attention to the plant's watering requirements are the best disease preventives. A humid environment can encourage fungal and bacterial diseases. The circulating air will discourage these organisms.

Whether you are a beginning enthusiast or a casual hobbyist, with a little attention to the basics of light, temperature and water, you can grow a beautiful exotic orchid.

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