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Summer Orchid Care

The Summer Doldrums: How to Care for Your Orchids During the Wilds of Summer

Summer presents challenges in the form of increased pest activity, fungal and bacterial problems in traditionally wet areas and desiccation in those areas with Mediterranean-like climates where summers are typically quite dry. Observation is the watchword for the summer months. Careful observation of your plants is the best way to identify small problems before they become big problems and in the summer, the time between these two events is dramatically shorter due to higher temperatures --- the earlier you catch a problem, the easier it is to control.



Soft brown scale

Pest Control

For small collections, the best thing to do is to physically wipe insects off and clean the plant. Isopropyl alcohol and a cotton swab are very effective against most pests and if you want to

increase its effectiveness, a drop of Ivory dishwashing liquid added to the alcohol helps wet the typically waxy surface of orchid leaves. If you haven't been watching carefully and the infestation gets out of control, you might have to use chemicals. Few pesticides are specifically rated for use on orchids but you can use any that are labeled for ornamentals. Use care and follow the label directions. This is NOT a situation where if a little is good, more will be better!

In areas with dry summers, mites can be a serious problem especially on phalaenopsis. These creatures attack the surface of the leaves producing a sort of rough, silvery appearance. Mites are not insects and insecticides offer little or no control. Mites do not like humid conditions so efforts to increase humidity are beneficial. Light infestations can be controlled by thoroughly cleaning plants but in hot, dry climates light infestations rapidly become serious and control is best accomplished by the use of a miticide.



Bacterial rot on Phalaenopsis leaf.

Areas with wet summers

Wet foliage and high humidity encourages the spread of fungal and bacterial diseases. Bacterial diseases do not respond to fungicides and vice versa so it's very important to know which disease you are dealing with. Perhaps the easiest way to distinguish between the two is by smell. The most common bacterial disease in orchids produces a foul smell often likened to dead fish. If you've ever had cut flowers stand too long in water you know the sort of smell we're talking about.



Black rot, a fungal disease on Cattleya leaves.

Diseases can spread quickly! Bacterial diseases kill plants especially rapidly and time is of the essence. Both bacterial and fungal diseases are spread by splashing water and this includes rainfall. Use a clean cutting tool like a single-edge razor blade, cut off the infected tissue as well as at least an inch of clean, green area and then treat the cut surface with a fungicide. Even if the problem is bacterial, you don't want a fungal infection to start in the wound. Cinnamon, yes the common spice, is effective against fungal diseases and this can be used to coat the cut surface as well. It's perhaps not as effective as a chemical fungicide but it's readily available and does work.

In wet summer areas, the to control is to keep your plants as dry as possible. Alternatively, provide a lot of air movement. When you water, try to do so as early in the day as possible. This will allow adequate time for the foliage to dry before nightfall.

Dry summer areas

The bane of orchid growers in these areas is extremely low humidity and this leads to two issues. The first of these is an increase in the rate at which plants dry out and the other is the ever-present mite issue.

Orchids in dry summer areas dry out much more rapidly than they did in the winter. Depending on temperature, plants watered every two weeks in the winter may need to be watered every few days in the summer. Here again, nothing will take the place of careful observation. If you have an extensive collection of plants, you might want to consider installing a misting system similar to those used in open-air restaurants in dry areas. Low pressure units that install on hose lines are inexpensive and work reasonably well to raise humidity as well as cool the growing area somewhat.



A desiccated Cattleya note lack of live roots.

Summer sun - how does that affect orchids

Solar radiation is much more intense in the summer and plants that have been happily in full sun all winter may need a little extra protection (shade) when the sun is the strongest or, often during the late afternoon when the temperatures are highest. Orchids are easily sunburned and you should take care when moving plants around, especially if you are moving plants grown inside during the winter to a spot outside for the summer. Sunburn, while not in itself a serious problem is irreversible and will make your plants look ugly. In serious cases the plant can be killed outright and any leaf damage is an invitation to a secondary infection in the damaged area.



Sunburn on a Bifrenaria leaf.

Orchid foliage should be a light yellow-green. The first sign of too much light is often yellow foliage. If left alone, this yellow foliage will eventually turn white and then dark brown and dry as the sunburned area dries out. If the problem is caught before the chlorophyll has been completely destroyed it is often possible to reverse the damage. Once white spots or sunken areas have appeared, the damage is irreversible and the best thing one can do is stop further progression with more shade.

Capitalizing on the high-growth season

Because of the increased light and temperatures, your plants will benefit from more fertilizer (increased frequency NOT concentration). This is especially true for those varieties that put out new growth during this time. Avoid fertilizers that contain significant amounts of urea. Urea requires soil organisms to convert it to forms useable by orchids and the process liberates significant amounts of acid. If you are growing in a predominantly inorganic media like rock or aliflor, soil organisms aren't prevalent and these media have poor buffering capacity. If you are growing in fir back media, as the medium ages, it naturally becomes more acidic and less able to buffer the pH shifts caused by metabolism of urea.

Plants will also dry out faster and to avoid root damage, water your plants first before fertilizing. This way the roots will be wet and much less easily damaged by the salts in the fertilizer solution.

If you grow your plants inside during the cooler months, moving them outside for the summer is very often a "shot in the arm" and your plants will respond with renewed vigor. There's something about natural air movement, humidity and rainfall that just can't be duplicated indoors. Just remember, make the transition slowly. Place them under very heavy shade for a few days, then somewhat less shade for a few days and then move them to their summer homes paying careful attention to the color of the foliage. You'll be glad you did.

Ron McHatton, AOS Director of Education, 2009