

Temperature

Following taken from "Tropical Orchidist ", Issue 6, "Help! My Orchid was Damaged by the Heat"

Your orchids need a lot of attention during the summer months, especially on hot days. With higher temperatures, orchids require more frequent watering to prevent dehydration. High temperatures quickly dry out mounted orchids, those in baskets and even potted plants. Maintaining the balance between keeping orchids sufficiently hydrated and over-watering can be a challenge. A simple rule of thumb is that an orchid's need for water increases and decreases with the ambient temperature, so water thoroughly and more frequently during higher temperatures. Most mounted plants and those in baskets, especially vandaceous orchids and other genera grown with little or no media, will benefit from daily watering in warmer weather. In addition, keep humidity high and air movement continuous, as both of these factors help plants keep their cool on hot days. Adding a fan to the growing area, or locating your orchids where they receive the caress of summer's breezes, as well as spacing your plants to allow for sufficient air circulation between orchids, can make a big difference in their environment and overall health. This will also help to keep rots from fungi and bacteria at bay. The benefits from misting orchids during hot weather do not have much sustained effect, so unless one has a misting system in place to maintain that added humidity throughout the day, it is probably not useful to your plants. When watering or misting, always be certain that plants have ample time to dry before night falls, so as to discourage bacterial and fungal growth. When moving orchids outside for the season, start them out in a shaded spot and gradually increase their exposure to sunlight to acclimate them to the higher outdoor light levels. Make sure to protect them from the strongest sunlight as midday summer sun has more intense UV rays that can burn tender plants. Check the amount of exposure your plants receive at different times during the day as the sun moves, and throughout the year as the earth's orbit around the sun makes its gradual seasonal changes, which in turn changes the angle of the exposure your plants receive.

For greenhouse growers, consider using shade cloth for added protection during the summer months.

Windowsill growers may want to add a sheer curtain during the summertime to keep sunlight reflected by the window glass from causing sunburn.

Finally, always have someone care for your orchids while you are away on summer vacation.

Signs of Heat Stress

These symptoms may appear singly, even in otherwise fairly healthy orchids. When they appear in

combination, however, it is usually an indication of heat stress or an underlying problem (such as root loss)

that has led to heat stress.

Yellowing of Plants and Leaves Too much light causes a plant's chlorophyll to deteriorate, which

can turn your orchid an anemic yellow-green, and eventually cause premature loss of leaves. Most healthy

orchids receiving appropriate light levels will be a robust light green.

Withered Leaves The culprit, especially in summer weather, can be overheating. If your plant's

leaves feel warm to the touch, they could be getting too much light, and need increased air circulation and

shading, or a move to a more protected area.

Sunburn Initial signs of sunburn, as in humans, appear as a reddish-purple tint or freckles on leaves

and pseudobulbs. In advanced stages, leaf tips and roots may brown, flowers drop, buds blast or flower spikes

fail altogether.

Shriveled Pseudobulbs Your orchid's pseudobulbs serve as its water-storage organs, so shriveled

pseudobulbs indicate a dehydrated orchid – it is in a stressed state, having used up its moisture reserves.

Leathery Leaves This goes beyond mere wilting, and occurs in the advanced stages of heat stress,

indicating severe desiccation and possible damage on the cellular level. Depending on how long the condition

has persisted, the type of orchid and its overall health aside from the leaf damage, it may or may not recover

once its leaves are parched.