



## Over-Watering and Under-Watering

These are most often the two most commonly seen problems. Pot size and decayed potting media can play important roles in these issues. Over-watering is the most common problem associated with poor performing orchids. Symptoms can look very similar to those of under-watered plants because it often rots the roots and therefore prevents them from taking up adequate amounts of water.

The first thing to do is to examine the roots of the plant. If the roots are rotted (soft, black and soggy) then chances are the plant is being over-watered. If the potting media is fresh and the pot size is not too large, then you will need to cut back on the frequency of your watering. Also, because the rot is often associated with a bacteria or fungus, you may need to drench the plant or pot with a good fungicide or bactericide. See “Common Orchid Diseases” for more information.

Under-watered plants often exhibit limp or withered leaves and withered stems or bulbs. This happens because the plant is not getting enough water to keep the leaves, bulbs, or stems turgid.

If the pot is not too small for the plant and the roots are in good health (white and firm), then this is easily remedied by watering the plant more frequently. Remember that Cattleyas and Dendrobiums like to dry between waterings. Once the potting media dries out, you should water the orchid promptly. Do not let the orchid stay dry for a prolonged period.

Also, realize that larger pots tend to stay wet longer than smaller pots. One trick to learn is to lift the pot up when it is ready to be watered and note the weight of the pot. Now, water your plant thoroughly and let it drain for 5 minutes, then lift the pot up and again note the weight. The difference in pot weight is noticeable and, over time, this can be a quick and easy way to tell when your plant requires watering.



## Over-Feeding and Under-Feeding

Orchids require plant food, known as fertilizer, for food. In nature, they receive this from dead or rotting plant and animal material. Regular feeding with an orchid plant food is essential to getting the best results from your orchids. There are several different nutrients that are required by the plant for proper growth. A plant food made specifically for orchids such as Better-Gro® Orchid Plus®, typically contains all the nutrients your orchids need.

For best results, always follow the directions on the plant food package.

Over-feeding (feeding at a higher than recommended rate) is the most commonly observed issue with plant food use. This is borne from the fallacy that if a little is good, more is better. Actually, over-fertilization can cause root burn which can lead to root rot and/or stunted plant growth.

Under-fed plants often have leaves that start to lighten in color (especially evident on the older leaves first) becoming more and more yellow. This leads to weaker, poor-growing plants that may not flower or that produce very weak flower spikes/stems with fewer and smaller flowers than normal.



## Improper Air Movement and Plant Spacing

Often overlooked is adequate air movement and proper plant spacing. Adequate air circulation (think gentle breeze, not gale force winds) is required to dry moisture from the leaves and flowers. If conditions are wet and humid and air circulation is poor, the plant may take up water faster than it can use it. Good air circulation is also important to help prevent fungal and bacterial infection.

Proper plant spacing helps to aid in air circulation. Prevent your orchid leaves and flowers from touching adjacent orchids as that can trap a thin layer of moisture between them, which is beneficial for fungal or bacterial growth. Plants should be given just enough space so that there is no prolonged touching of leaves and flowers. This is also important to help prevent the movement of infection from one plant to another.



## Improper Light Levels

The right amount of light is essential for maintaining plant growth and encouraging re-flowering of your orchid.

High light levels lead to leaves that are yellowish in color and in some cases can cause scorching of the leaves. This scorching first appears as white patches on uppermost leaves, which eventually turn brown. Extreme cases of scorching can kill the plant! Yellowish leaves caused by high light levels are easily remedied by moving the plant to a slightly shadier spot.

Low light levels typically won't kill your plant, but it is the most common reason people fail to re-bloom their orchids. In this scenario, plant leaves are typically dark green and the plant fails to re-flower during its normal blooming season. The ideal leaf color should be an even, medium-green. Slowly increase the light level over a couple months by introducing the plant to slightly brighter conditions, until the desired leaf color is recognized. In Phalaenopsis, low light levels can also lead to soft, floppy elongated leaves.

Most orchid problems are preventable.

- Keep your growing area clean
- Water only as necessary and as early in the day as possible
- Feed at recommended rates
- Space your plants well
- Make sure they have adequate air circulation