

Growing Phalaenopsis

Phalaenopsis are the most popular flowering houseplants in the US and are available in nearly every grocery and big box store. Unfortunately, most of them are sold in pots with no drainage and are really meant to be thrown away after they are done blooming. Most of the plants sold are either grown in South Florida or are cheaply imported from Asia. In most cases though, after the plants are done flowering, it is pretty simple to repot, rehabilitate, and reflower them unless you wait too long.

Repotting - Those pots I mentioned that don't have drainage should be discarded and the plants repotted into some kind of plastic pots with multiple drain holes in the bottom. I typically repot into azalea pots, which have at least 8 holes in the bottom with some kind of bark-based orchid mix. Most of the time I use the largest size of Orchidata orchid bark that I can find, and I might or might not add other things to it (charcoal, perlite, Aliflor, or lava rock), depending on what is available.

Phalaenopsis are epiphytes, which means that in nature they grow high in the tops of trees, where they wrap their many long roots around a branch or the tree's trunk. Those roots get wet with rain and then dry out from the ever-present winds. Most plants for sale are hybrids and they are really good at growing roots. When you grow them in pots, some of the roots will grow out high enough on the plant that they cannot grow into the pot (see **Figure 1**). That is OK as long as you water and feed those roots too. I have heard people call these "air roots", but they are no different than any other roots on the plant.



Figure 1 – Typical Phalaenopsis Plant with Emerging Roots and Flower Spike.

Making my plants flower - New flower spikes will usually grow out a little higher in the plant and are usually pretty easy to distinguish from roots. The plant is stimulated to flower in the late fall as autumn night-time temperatures drop. I usually see new spikes forming in mid-November. I allow those night-time temperatures to drop into the 50s for a week or so and that is all it takes to trigger the plants to start growing their flower spikes. After that week is over, I raise the temperature and maintain a minimum of 65F through the winter. Flowering Phalaenopsis that are for sale in stores have usually been forced to bloom out of season using this same method, but left on their own they will nearly all bloom in early spring after growing their flower spikes through the winter. People who have trouble getting their plant to flower usually keep their room temperature at the same setting year-round and the plants never know when it is time to flower.

How and when to water – Phalaenopsis plants should not be allowed to get completely dry. I know that some people like to soak the plants to water them, but I prefer to water them in the kitchen sink with the sprayer attachment. When I do, I set the water temperature to lukewarm and proceed to soak the growing media and roots. I want to make sure that every root above and below the media surface is soaked. Soaking them might also be efficient, but it is also a good way to spread pests or diseases from one plant to another, so I avoid doing it.

When and how to feed the plants – I commonly say weakly - weekly, which means to use a weak fertilizer mixture every week. I find that great orchid fertilizers can be hard to find, but just about any plant fertilizer will do the job. If the label gives a mixing range (for example, $\frac{1}{4}$ - $\frac{1}{2}$ teaspoon per gallon), always select the weaker mixture to avoid burning the roots. After I water and the plant drains for a few minutes, that is the perfect time to pour some premixed fertilizer over the plant's roots. I fertilize every time I water. I wait a couple of hours before I put the plant back in its growing area and I make sure that it never sits in a saucer of water. Letting an orchid plant of any kind sit in water not only provides a breeding ground for root rot but also cuts off the essential flow of air through those holes in the bottom of the pot.

Giving my plant the right amount of light – One of the great things about Phalaenopsis orchids is that they do not require any direct sunlight. Some sun shining on them in an air-conditioned room will usually not hurt them, but they really need only bright indirect light to stay healthy and to bloom. A location near a bright window is usually adequate. If that kind of location is not available, a few hours of light from a proper grow-light will usually do the trick. If, on the other hand, you have lots of available light, you might try some of the other 50,000 orchid species! I grow many Cattleya orchids and sell some of them on this site [Carrboro Tropicals](#).

Air movement – Standing water and stagnant air are a recipe for orchid growing problems. **Figure 2** shows how orchids grow in nature; the closer we come to that, the better they will grow.



Figure 2 – Orchids Growing in a Tree.

Grooming your plants – In the summer when most of the blooms are gone, I prefer to cut off the flower spikes off at the base. Leaving them on will not only drain the plant of the energy it should be putting into growth of new roots and leaves to strengthen the plant for the next

season's flowers, but the plant can also grow new spikes out of the top of the old spikes, which make the whole thing way too tall to be very attractive. I prefer to cut everything off and start over with new flower spikes each spring.

Be careful to avoid using clippers on green plant tissue. This is to avoid spreading disease from one plant to another. Orchid viruses are common and can be transmitted from one plant to another using tools. I prefer to use a new single-use razor blade on each plant when I have to trim anything off.

If you look at the plant in **Figure 1**, you will see mineral deposits on the leaves. These come from watering with well water with elevated levels of dissolved solids. It does not hurt the plant, but if you are a stickler for cleaner leaves, you can clean them with a dilute acidic solution of either lemon juice or vinegar and a soft clean rag.

At least under my conditions, while the new flower spikes are growing and the sun is only about 35 degrees above the horizon in the winter, since the flowers spikes grow toward the light, I have to stake them to make them stand up straight. I wait until the spikes are at least a foot high and can be bent without damaging them (see **Figure 3**).



Figure 3 – Mature Phalaenopsis in spike.