**New York Botanical Garden: Orchids: Potting and Dividing**

All Orchidophiles have their particular techniques for potting and dividing orchids. Likewise, every orchid has a slightly different cultural requirement and every home offers a different environment to work within. Whatever tricks of the trade you pick up along the way are for you to experiment with. This guide covers the basics.

First of all, it's important to know what type of orchid you have. Look for a plant label when you buy the orchid or ask what kind it is. You can also look it up in any of the common guides to growing orchids as houseplants. Knowing the name of your orchid will help you learn how to keep it healthy and encourage it to flower again.

**What Type of Orchid Do I Have?**

There are two types of orchids: sympodial orchids and monopodial orchids. Sympodial orchids (such as cattleyas and oncidium) grow on rhizomes and spread along the surface of the pot. Monopodial orchids (like vandas and phalaenopsis) grow upright from one growing point, producing roots and sometimes offshoots (keiki) on either their stems or flower spikes. As a general rule, monopodial orchids will not need dividing. Sympodial orchids can be divided during re-potting for propagation.

**Why Repot or Divide Orchids?**

There are a number of reasons. Perhaps it has outgrown its container. Or perhaps over-watering or over-fertilizing has damaged the root system. The most common potting mixes used for orchids are fir bark mixtures. With watering and fertilizing, these mixtures tend to break down within a year or two and need to be replaced. When fir bark mixtures start to deteriorate, they get darker and spongier and may develop a musty or rotted odor. This deteriorated mixture can damage orchid plants delicate roots. Accumulation of fertilizer salts in the potting mix can also damage root systems.  Eventually, all plants need to be taken out of their existing potting medium and given a healthy new home.

**When Should You Repot Your Orchids?**

The best time to re-pot most orchids is after flowering when all the flowers have faded. Many orchids produce new growth at this stage and will benefit from re-potting. Many common orchids, such as phalaenopsis, flower in the winter and produce new growth in the spring and summer. Re-pot and divide these orchids after flowering in the spring.  As a general rule, you should re-pot your orchids plants everyone to three years.

When you purchase your orchid, inspect the potting medium. If it is a fir bark blend, then it usually will be good for a year or two. Some orchids are sold in sphagnum moss. While it is an excellent medium for some of the more moisture-loving orchids, it can be challenging for the beginner. Sphagnum moss tends to dry out around the edges and stays very moist in the center so be careful not to over-water.  Re-potting the orchid into an easier medium may be helpful.

**When Should You Avoid Repotting Orchids?**

It's best not to re-pot your orchids when they are in bud or flowering. The plant is working too hard placing its energy into the bloom. The stress of re-potting may cause the buds to drop or may shorten the life of the blossoms.

**Cleanliness Counts**

Because orchids are susceptible to plant viruses, it is important to work with clean tools and clean hands. Wash your hands often when handling different orchids or wear latex gloves. Divide and re-pot your orchids on layers of newspaper, so that you can easily clean the debris from one plant before working on another. Disinfect tools with ether a 10% bleach solution (1 part bleach to 9 parts water) or isopropyl or rubbing alcohol (70% straight from the bottle). Soak for a minimum of ten minutes. Disposable utility razor blades can be purchased at a hardware store and work well for trimming roots and dividing orchids. Pots can be disinfected with the 10% bleach solution.

**Steps for repotting and dividing orchids:**

1. Water your orchid well, letting water drain through the pot. It is easier to remove an orchid from its pot and to work with the potting medium when it is moist.
2. If the roots are stuck to the sides of the pot, take a sterilized knife and detach them by running the knife along the interior surface of the container.
3. Remove as much of the old potting medium as possible. Old potting material will continue to deteriorate and create damp pockets in your potting mixture that will encourage root rot.
4. Examine the roots of the orchid and remove damaged and dead roots. For most orchids, healthy roots will vary from a hairy chestnut brown to succulent greenish-white. The easiest way to tell if a root is healthy is to gently squeeze it; it should be nice and firm. Papery, dehydrated roots should be removed along with any black, mushy roots. Cut roots with sterilized scissors, pruners, or a razor blade. Groom the orchid by removing any dead or diseased leaves.
5. If it is a sympodial orchid that requires dividing, look for logical places to split the orchid into pieces. A new division should have at least 3 pseudobulbs (stems). With some sympodial orchids you can simply pull them apart with your hands. Others will need to be divided by cutting through with a sterilized knife or pruners. If the orchid is large enough, some of the older pseudobulbs can be removed. Remove any that are dried and deteriorating. Remember that old pseudobulbs still store water and photosynthesize even when the leaves fall off, so don't get rid of them too quickly.
6. Re-pot your orchids in a sterilized container. Orchids, like many houseplants, prefer to be pot-bound. It is best to size the container by finding one that the root system of the plant will comfortably fit in. Larger containers take longer to dry out and potting mixtures tend not  be well aerated. If you are re-potting an orchid and need a larger pot, increase the pot by one pot size. If you are dividing, place it in a pot that will accommodate two years worth of growth. Terra-cotta pots are porous and allow the medium to breathe. These are particularly well suited to orchids that like to dry out between watering. Plastic pots retain moisture and are best for orchids that like to stay moist.
7. Good drainage and aeration is imperative to successfully growing any kind or orchid. Choose a potting mix that is suitable to the growing requirements of your orchid. Mixtures often contain fir bark, available in small, medium, and large. Some other common ingredients are charcoal, perlite, tree fern fiber and sphagnum moss.
8. Position monopodial orchids in the center of the pot with the base of the plant at surface level. At this time you can plant some of the aerial roots, but you do not have to plant all of them - they are a natural part of the plants growth. Position sympodial orchids with the oldest pseudobulb against the edge of the pot and the new growth facing the center.  This will give it the largest amount of space to grow. The rhizome should either be level with or just below the surface of the potting mix.
9. Hold the orchid with one hand and scoop the new potting mix into the pot with the other. Occasionally tap it down with your fingers or with a pencil. Tap the pot on the side to help the mix settle. Press firmly on the surface of the medium to secure the plant in place.  You can add additional supports such as bamboo stakes as needed until the plant is established in the new pot. Once you have finished re-potting, water the orchid thoroughly. This will also help the mix to settle.
10. Place your orchids back in their home. If you have taken off a lot of roots, you may want to place them in a slightly shady area while they recuperate. Some shriveling of the pseudobulbs and leaves may occur after repotting until the roots re-establish themselves.  Don't fertilize them for several weeks they are readjusting.