# Table of Contents

- Cuttings .......................................................................................................................................................................2
- Potting Mix .................................................................................................................................................................2
- Watering .....................................................................................................................................................................3
- Light ............................................................................................................................................................................3
- Temperatures .............................................................................................................................................................4
- Air Circulation ............................................................................................................................................................4
- New Growth ...............................................................................................................................................................4
- Miscellaneous information on Cuttings .........................................................................................................................4
  - Air roots ..................................................................................................................................................................4
  - Buds ........................................................................................................................................................................4
  - Fertilizers ................................................................................................................................................................5
  - Transplanting ..........................................................................................................................................................6
Cuttings
Cuttings should be taken from mature growth (about 2 years or older). Ideal cutting are 6 to 8 inches long and has 6 to 7 areoles. Areoles that have bloomed will not bloom again nor will they send out roots. So make sure that your cuttings have the required number of fresh areoles available for new growth. Let your news cuttings heal/cure in a cool dry place from 7 to 10 days to help prevent them from rotting in damp soil when they are started.

Some individuals prefer to use rooting compound to when potting and others do not. There is no conclusive evidence available weather rooting compound makes a difference. New cutting should be planted in 4 inch pots. A number of members recommend planting 2 or 3 cutting cuttings from the same variety in the 4 inch pot. Epiphyllum prefer to be a little root bound before blooming. Planting multiple plants of the same variety seems to shorten the time it takes for the plant to bloom. Never mix varieties in the same pot as the faster growing one will normally strangle the weaker one. Some growers add a teaspoon of bone meal in their potting mix to provide slow-acting nutrients.

Plant your cuttings 1 to 2 inches deep in slightly damp potting mix. The idea is to have at least two areoles below the surface of the potting mix. You may have to stake heavier or longer cutting if they tend to fall over. Keep in mind if you have a cutting with 12 areoles it would be preferable to cut it in half and plant to cuttings. Also, unless your plant becomes too top-heavy it can stay in this small container until it blooms which will normally be in 2 or 3 years.

Do not water a new cutting for the first week and then very sparingly for the next month. Until the cutting develops roots it may start to rot. If it does just cut off the rot, let it heal/cure and start again. Once it starts has rooted you should never let it dry out completely as the smaller roots may die.

Potting Mix
This is an area where there are a multitude of choices. The main thing to remember is that your mix should be loose and well-draining. There are dozens of recipes for epiphyllum mixes available in on the internet and in books or magazines. The best advice comes from other epiphyllum growers in your micro-climate area. At San Diego Epiphyllum Society (SDES) meetings there is normally a nursery setup where potting soil may be purchased. If you wish to know what growers in your micro-climate area use come to a meeting or if you are a SDES member you may check out the members only pages.

Commercial potting soils do not normally drain well enough to be used when growing epiphyllum. They required some additional ingredients to improve drainage. Some recommendations include pumice, charcoal, orchid bark, perlite, small fir bark, oak leaf mold, sphagnum moss, redwood bark
fiber, etc. Using fine sand is not recommended as a soil additive it will eventually shift to the bottom of the pot and cake there. If you live in San Diego area Hanson’s A1 Soils has a “potting mix” which is used by a local hybridizer without any additional additives required.

Mixing your own potting soil is not difficult the rule of thumb is 3 parts commercial potting soil 1 part something to improve drainage such as pumice or perlite. Keep in mind too heavy a soil holds excess moisture and does not allow for proper root aeration. Epiphyllums grow in trees and their roots receive considerably more aeration than plants that normally grow in the ground.

Watering
Once epiphyllums have established roots they should be thoroughly watered every 5 to 10 days depending on the temperature and your micro-climate. Within this time frame they should have dried out moderately but not completely. Be careful not to let your epiphyllums dry out completely as you then have a chance that the smaller feeder roots system will be damaged. Watering epiphyllums is a balancing act.

Keep in mind that one thorough watering is better than several light watering and the soil needs to drain well. Leaving a plant in standing water is a surefire way to kill it. Poor draining soil is also a way to kill a plant as poor draining soil reduces the plant’s supply of oxygen and keeps the soil soggy which promoting root rot or fertilizer salt crust buildup. Fertilizer salt buildup may cause root burn which will turn the tops of the branches yellow. Through watering in a good draining pot washes away these salts.

Occasionally it seems to be beneficial to wash off the foliage. This should not be done during the heat of the day or when buds are developing.

Epiphyllums prefer about 50% humidity but will tolerate less. Some growers like to wet down the ground under their plants during hot dry summer months to increase the humidity. The effectiveness of this depends on a lot of variables related to the actual location your plants are being grown. If you live on the coast, the humidity likely remains above 40% most of the time naturally. For others living in hot dry areas misting a couple of hours after the peak heat or in the early evenings will be helpful. Mistng prior to a couple of hours after the heat of the day may cause problems so be safe and mist early evening allowing time for the plant foliage to dry out before sunset.

Light
Epiphyllums prefer partial sun and never direct noon-time sun. They may be grown under lathe, shade cloth, trees, patios, balconies or in a few cases indoors (if next to a window with good sunlight). Individual plants will prefer different locations. Watch your plants and move them accordingly. Yellow
or sunburned growth indicates too much sun. Weak or spindly growth without a strong mid-rib means inadequate light. Keep in mind that it is better to have too much light than not enough as light is required for blooms.

**Temperatures**
Epiphyllums prefer a temperature range between 45% and 70%. They will however tolerate extreme heat if well-shades and humidity remains reasonable. They will also tolerate temperatures below freezing for a short time. Cold damage may occur if temperatures remain below 40% for prolonged period of time. Damage will occur if the plant is exposed to temperatures much below freezing for more than an hour or so. Keep in mind that ground temperatures are colder than areas a few feet above ground or areas next to your house.

**Air Circulation**
Epiphyllums like air to circulate around them. They do not like winds but do like air movement be mindful of this when crowding your plants close together in an area with restricted airflow. Lack of good

**New Growth**
It may take patients. New growth may start in a few weeks for some varieties and for others it may take months. Some varieties do better along the coast some inland. Some take lots of pampering others seem to thrive on neglect. Every epiphyllum is different your first sign of growth may be “rabbit ears” if the rest of the cutting seems to be healthy you may want to cut these off as they rarely grow into branches that readily bloom and they do drain energy from the cutting that is better used for roots and other new growth for the base of the plant.

**Miscellanies information on Cuttings**

**Air roots**
The development of some air roots on a cutting is normal in some varieties. If a plant develops an excessive number of air roots it may be due to too much shade or not getting enough food.

**Buds**
Some cutting will put out buds. If they do not drop off themselves it is recommended that you cut them off. Most of these blooms will not be full size. It takes a lot of energy for a plant to bloom and for a cutting that has just rooted it will set back the plants development. However letting it bloom will not kill your plant.
**Fertilizers**

Fertilizers are typically labeled as to the percentage of Nitrogen – Phosphorous – Potash (N-P-K) which are the major ingredients required for plant growth. Nitrogen promotes leaf and stem growth. It enhances green coloring and increases protein levels. Heavy applications may cause leaf tip burn, spotting and more branch growth than flowers. Phosphorous is responsible for flower and fruit productions, root growth and resistance to decease. Symptoms of not enough phosphorous include stunted, purple or dark green foliage, die back of old leaves and poor fruit and flower productions. Potash is responsible for hardiness, root growth and proper development of cell membranes. Shortages cause older leaves to scorch on the margins, weak stems and shriveled fruit.

Epiphyllums prefer a low nitrogen fertilizer such as 5-10-10 or even 2-10-10. Balanced ones such as 8-8-8 are also acceptable. In February or March most epiphyllum growers feed their plants 0-10-10 or 2-10-10 to promote flower production.

Using slow-release granular, liquid or foliar fertilizer is a person choice. Slow release granules mean you apply by hand but less often because very time you water a little fertilizer will be dissolved. Liquid is easier to apply, but must be done more often than slow-release granular fertilizers. Foliar is sprayed on the leaves and produces lush growth, but slightly weaker branches.

Whichever type of fertilizer you choose read the instructions and apply approximately ½ of what is called for normal potted plants. Too much fertilizer can burn the roots. Be careful that granulated fertilizer is not stacked against the plant stem as it can burn it. If you prefer to sue liquid fertilizers, experiment a bit to find the right amount so you don’t over fertilize your plants. Foliar fertilizers take the most time because you must ensure each plant receives the correct amount.

Do not fertilize dry plants. Make sure to water them 2 or 3 days prior to fertilizing them.

It is recommended that you fertilize your epiphyllums 3 time a year (March –April, June- July and September-October). In colder climates you may want to fertilize them twice during these 3 time periods.

Epiphyllum enjoy being root bound as long as they have adequate nourishment. Unless you have an epiphyllum that is actively growing or even setting buds during the winter months give them a rest period in December and January by not fertilizing and cutting back on the watering.
Transplanting
Check your year old cuttings for growth. If they do not show heavy growth leave them in their current container. Those that have produced long heavy branches (2 or 3 branches that are 6 or more inches in length) can be potted into a larger container. Make sure that all of your pots have large drainage holes. To prevent potting mix from washing out, you can cover the holes with cheesecloth, pieces of screening, broken clay pots, etc. Make sure not to use too large a pot as epiphyllums have a relatively small root system and like to be root bound to produce better blooms.

For mature epiphyllums removing them from the pot and replacing the potting soil with a fresh mix is enough. Most growers do not plant epiphyllum into larger than 2 gallon pots for shelf plants and 1 gallon (6-8 inch) pots for hanging plants.

Before repotting a plant allow the soil to dry out and remove the plant from the old container. Gently shake of the loose soil around the roots. Roots can be trimmed back if needed. Keep the roots spread out when repotting in dry soil mix. If it is a 1 gallon pot most use the same pot over again. Do not water the repotted plant for a week. The ultra fine root hairs are easily damaged in transplanting and when damaged are susceptible to fungi if watered too soon. Give them time to heal over. If the plant looks like it needs water, just mist it a little.