

We want your experience with orchids to be a happy one with many beautiful flowers in your future. This brief explanation will cover the basics; but, as with most things, it can be made as complicated as one's imagination will allow. We'll keep it simple.

## Some history about your flask of orchids:



For about the first two years of an orchid's life it is grown in vitro, which means in an environment that is sterile. It is one process of plant propagation that's created in a tissue culture laboratory. Orchid seeds have no stored carbohydrates. The lab technicians supply the media to initiate germination and growth. The media is made of a gelling agent, fertilizer salts, sugar and water. Occasionally there are some other ingredients such as charcoal, coconut water and banana. The seeds (very small and look like dust particles) are put onto the media and will germinate in less than one year. Once they have germinated the pronto corns (very small green dots) will be put into another flask and thinned out a bit. After about six months, when they have formed the beginnings of leaves and roots, they will be moved to another flask and thinned again to about 40 plants per flask. They will arow in this flask for about six months to a year before

they are ready to be planted out. The flask which you have purchased is now in this stage.

## Planting out your flask:

## CAUTION: This flask vessel is made out of glass! Please proceed with caution (use proper safety/garden gloves) when removing the plants.

**Method 1:** Fill a large bucket or container with about a foot in depth of water. Invert the bottle and lightly tap the rubber stopper end on a table to direct the plants toward the capped end of the bottle. Holding the bottle at its neck, slightly submerge the other end in the water. Gently tap the bottom of the flask with a hammer or mallet. Break off the bottom portion of the flask & allow the glass to fall to the bottom bucket. Some of the plant may also fall in the water, that's ok. Carefully and gently, remove them from the water with a chopstick or tongs. Be sure to rinse off the agar media with water from the remaining plants. Untangle and separate each plant onto a moist clean paper towel. Be careful not to damage the roots.

**Method 2:** Alternatively, you can also wrap the glass flask in a towel. Tap the back end of the flask with a hammer or mallet. Breaking off the back end should allow you to shake the plants out of the flask. Use long forceps, tweezers, chopsticks, etc. to pick out the plants. It would be best to rinse the plants in a bucket of water to allow any glass pieces to fall to the bottom. Untangle and separate each plant onto a moist clean paper towel. Be careful not to damage the roots.

Now that you have the plants out of the flask, you will need a suitable pot for them. A 2" plastic pot will do fine and are easy to come by. Mix one part of ground peat moss with one part of number two perlite (number two is about 1/8 inch). These ingredients can be purchased in most garden shops. Moisten the mixture with clean water until fluffy and damp. Then holding the plant in the pot, gradually fill the peat mixture around the roots, do not place mixture above the base of leaves. Fill the pot 2/3 full with the mixture and softly press media. Do not pack it down.

Another planting method is to use an all sphagnum moss media (moss must be new and unused). Soak moss with clean water, and then squeeze out excess water before using to pot with. Surround roots with moist moss and tuck into pot. Do not over pack pot with moss; the roots NEED air circulation. Keep the moss moist but not soggy.

The newly transplanted orchids should be kept in an area with diffused light, good air circulation and about 40 to 60 percent relative humidity.

Now that the plants are potted up, you may want to use a general purpose fungicide (a root and foliar fungicide) every couple of weeks after planting for the first few months. This fungicide can be purchased at any garden shop. You do not necessarily need to use the fungicide as this is just a preventive measure. If you do decide to use it; follow the directions on the container for making the solution and keep it in a separate container for use. Once this is done, water your plant first then put about 1/2 tbsp. of the fungicide solution in each pot.

The watering frequency will depend on the warmth and dryness of your location. Water only when the media starts to dry out; this is when the media starts to lighten in color and weight. Liquid fertilizing may be started three weeks after planting, and may be continually given once a week. Use a general purpose liquid fertilizer at half the recommended rate.

You could have flowers, depending on your growing location and expertise, in three to four years. Happy growing and may your life be blessed with many lovely and fragrant blossoms.

## Akatsuka Orchid Gardens

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