

Potting Orchid Seedlings from Flask

I could not find much information or advice online about potting orchids out of flask, so I had to develop my own method. I have tried New Zealand sphagnum and various bark-based mixes in community pots and had some success, but I noticed that when I purchased plugs growing in oasis, they always looked the best and had the best root systems.

Most orchid plants spend the first months of years of their lives in a flask of some sort. If you send an orchid seedpod to a lab for flasking, you will eventually receive back a flask (or usually several flasks) of small seedlings (see **Fig 1**). It's important to remember that atmospheric pressure fluctuations during shipping can lead to contamination of the media in the flasks, so I keep a close eye on them after they get here, and I pot the plants out at the first opportunity.



Fig 1 - Flasks of Orchid Seedlings from the Lab.

Hopefully the plants within the flasks have great roots because roots are essential to survival of the plants after they are potted out. I was happy to see that the plants in **Fig 2** have especially good roots.



Fig 2 – Seedling Roots after Media is Washed Off.

After I remove the chunk of plants from the flask, I wash the media off the roots under the kitchen faucet. With glass flasks, I generally break the glass rather than attempt to fish the plants out through a narrow opening. I hate to break plants trying to save a flask that will probably never get reused anyway. With a plastic flask, removal is easy.

After I remove the media, I carefully separate the plants, put them on a kitchen plate, and set aside plants that have such big root systems that I would have trouble stuffing them into a 1" cell. I will put those up with regular potting media. My experience is that they will grow faster in the cell tray, so I set aside only the largest plants for potting. For reference, I prefer 72-cell trays and use 1" oasis growing media in the cells.



Fig 3 – Separated Plants with Larger Ones in the Back Ready for Pots.

I bought a case of 20 sheets of 162 oasis pieces per sheet. At this point I get my oasis plugs broken apart and I like to get them wet (see **Fig 4**). I really don't think it matters whether I soak them or not as long as they are not totally dry.



Fig 4 - Oasis Plugs Ready for Planting.

I grab each little plant and stuff it into a cell next to the oasis plug, trying to keep the media from touching any green part of the plantlet (I want the media to only touch the roots). This is exactly how I pot bigger plants too with no media touching the plant itself. The plugs have holes in them but I don't use them and place them with the hole at the bottom.



Fig 5 – Holding the Tiny Plant.

I continue until the tray is full and then move to the next tray. These end up in the lowest light part of the greenhouse with the Phalaenopsis and I water them every day or 2. The oasis plugs soaks up water readily but also dry out in a day or 2.



Fig 6 – Trays of Seedlings on the Bench.

I will leave these in trays for a year or more and will remove them only when they have big vibrant root systems that will quickly grow into a pot. In warm weather algae might build up on the plugs, so I might have to apply a fungicide.

With my growing conditions and watering habits, I remove and discard the oasis chunks when I replot the plants out of cell trays. You don't know how many plants I have rotted by leaving oasis or sphagnum moss plugs on the plant when potting it. Remember, this is all new and experimental for me at this point and is geared toward my conditions only. Don't blame me if these instructions don't work under your conditions