

De-flasking the genus *Catasetinae*

With the resurgence of popularity in the genus *Catasetinae* which include *Catasetum Cycnoches*, *Mormodes*, and *Clowesia* many are asking how to de-flask these as they grow and look very different in flask from other orchids. When the plantlets are re-plated for the final time the new shoots elongate quickly and have a tendency to produce aerial roots along the internodes with a small bulblet that develops often an inch or more above the agar. So the big question is how to plant out these unruly looking plantlets?

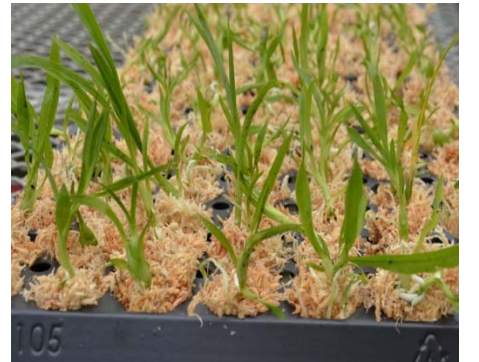
It is important to remember that as a part of their annual growth cycle, these orchids have an active summer growth phase and distinct winter dormancy. When de-flasking do so in the early spring, this allows for minimal stress and more importantly assures a long growing season where the new growths will have ample time to develop and mature before winter arrives.

There are 2 methods in removing plants from flask I use both techniques depending on the conditions and density of the plants in flask. Method one is to wrap the bottle with a sheet of news paper and with a hammer hit the base of the flask with a downward glancing blow away from your body. With some practice this will cleanly break the base of the flask and not harm the plants. The second method is to fill the flasks with a dilute quaternary ammonia compound like Physan 20, Consan Triple Action 20 or RD20. It is very important to use the labeled rate, more is not better. Fill the flask and shake to loosen the agar then turn over the bottle and dump the contents out.



Once removed from the flask, select and grade the plantlets by size. This is to make planting the largest to the smallest plants easier to accomplish. I have experimented with potting the plants into community pots and cell trays. The best growth has resulted with the 105 cell trays (like the ones nursery use for planting seeds) and use slightly moist AAA New Zealand sphagnum moss and the potting media.

Select the largest plantlet and wrap the NZ moss around roots and stem covering it up to the base of the bulblet forming a medium tight moss ball. Insert moss ball and plant into cell tray, it should be snug, not loose or too tight. The moss should be flush with the top of the 105 cell tray. Don't get concerned about filling the cell completely with moss; it may be better to have an air gap below the moss, I have noticed better drainage and root development leaving the gap. Select the next largest plant and repeat.



Once the plant material is potted in the 105 trays I write 4 tags with the date, name and number of the cross one for each of the 4 corners of the cell tray, this assures the block of plants is well marked.

Optimal temperatures for the first 3 months are: 23-28 C days and 18-21 C nights.

A heating mat can be very useful during the early spring and fall to assure the night temperatures are maintained.

Light levels at 1000 fc and humidity levels at 50-80% are ideal. Fertilization is very important for young plants from flasks, use ¼ tsp fertilized for every 4 ltr of water.

Careful attention to watering at this early stage is one of the most important aspects to getting a good start. As the moss holds lots of water monitor the moisture levels and allow the plugs to dry down but not become dry before the next watering is fundamental in your success. By having overly wet plugs for a long period of time will rot the roots and set the plantlets back or even kill them.

After three months and until early fall the plants will be developing new roots and top growth keep the night temperatures the same and higher day temps up to 30-33 C are fine. Light levels can be increased to 1500 fc while maintaining the 50-80% humidity. Continue to manage the moisture levels of the moss allowing for the wet to almost dry cycles and continue the fertilization as described earlier.

By late fall the plants will have developed a nice little bulb. With the change in season the plants will want to go dormant but you want these first year plants to keep growing as long as possible and have a short dormancy. In order to assure this the night temperatures are maintained at 18-21 C. With the arrival winter and short days, special attention to irrigation frequency is now needed in order to avoid over watering.

In early spring the new growth will start at the base of the previous growth and when it is about three cm long it is time to pot up into 60mm pot. AAA New Zealand sphagnum moss is the media of choice, place a few Styrofoam peanuts or similar in the bottom of the pots prior to potting to allow for an air gap in the bottom.

If you are just getting interested in the Catasetinae alliance, I am sure you will be surprised by the spectacular flowers and how easy they are to grow.

If you have been growing Catasetinae, you already understand.....

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