

Easy *Vanda falcata* Culture

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I started raising *Vanda falcata* (formerly *Neofinetia falcata*) and closely related orchids in earnest about two years ago, buying my first plants from Natt's and New World Orchids at the September, Chicagoland event. I have now become intrigued by the Japanese varieties (Fukiran) which are often grown for their leaf/fan structure (tsuke) as much as for their flowers. At the time I began growing *Vanda falcata*s, my set-up was simple: pots placed on humidity trays in a 24" wide shelving unit using grow lights. I quickly changed the lights out to T5 grow lights, but still wasn't satisfied with the results and the amount of work to keep them watered and to keep the humidity up.

I decided that I wanted to move the plants to the basement and purchased a Homebox 120 from Paradigm Gardens, which is about 39" x 39" x 72" and added a second 4-bulb T5 unit. I also swapped out the standard "grow" bulbs for Eye Hortilux Power Veg bulbs. Each light now has two FS-UV bulbs, one red 660 bulb, and one blue 420 bulb. The plants sat on a homeconstructed cedar shelf. While it was easier to keep the humidity up, I still wasn't happy with the time needed for watering or with the quality of plant growth. By now it was early 2018 and the number of plants had increased to over 30. Funny how that happens!

After consulting with Dennis at Paradigm Gardens, I decided to try an ebb and flow, hydroponic system. The 36" x 36" two-shelf stand was constructed out of 1" x 4" cedar, topped with a heavy duty cedar lattice. The lower shelf holds the 20 gallon water supply and the upper shelf holds the 36" x 36" plant tray. To allow for maximum drainage, the plants sit at various heights on pieces of egg crate fluorescent light diffusers. I have also repotted all of my plants into mesh pots using Orchiata



Vanda falcata [as *Limodorum falcatum*]

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Power+ Bark. I have two 6" duct fans, one at the bottom of the Homebox blowing air in and one at the top sucking air out. This helps to cool the plants as the light fixtures add significant heat. There are also two small fans that blow directly onto the plants to provide air movement and drying. A digital timer provides for watering on Tuesday, Thursday, and Saturday for 21 minutes which allows for thorough soaking of the plants. An analog timer controls the lighting, which is currently on for about 14 hours a day. All fans and the aerator in the water tank run 24/7.

The water tank is filled with RO water. To this I add cal-mag and General Hydroponics Rapid Start rooting enhancer which is a 1-0.5-1 organic fertilizer. I then balance the pH to about 7.5. The water is changed out monthly. Now all I have to do is spray the plants daily with fertilizer mixture which keeps the aerial roots from desiccating.

Within a week of going to this system I was able to see a noticeable change in the plants. The roots were proliferating and the plants appeared much healthier. They have been continuing to perform very well adding new leaves and new fans, as is their habit. The next step: adjusting lighting to encourage blooming during the show season.