



Orchid Houses

It was May 2014 when I accepted a new position with my employer and agreed to move to the Bundaberg area. Having been growing orchids for many years and having become totally obsessed with them meant that they also had to move.



Part of my rationale behind the acceptance of the move was that my favourite orchids, the Vanda family, should grow better in the warmer climate of Bundaberg compared to the chilly winters around Toowoomba. Little did I realise what a chain of events this would lead me into. Firstly, we needed to find a new home for ourselves, one with enough land to allow the space required for some orchid houses as well. The property had to be clear enough to allow sunshine to penetrate for the orchids and preferably face a northerly direction. After a great deal of searching we settled on our current home at Moore Park Beach, and after some tree removal the orchid houses were to become a reality.

The trick, I decided, was to seek some local climate and cultural knowledge before construction commenced on any new orchid houses so I could obtain the best options possible within my price range. So prior to moving to the area, I began seeking opinions from a number of local growers with knowledge of the area. This would be the most important step in building a new orchid house if you are going to an area that is unfamiliar to you and I strongly recommend speaking to the locals first for information.

Over many years of growing orchids a few things have come to my attention. I believe that the most important aspects to be able to grow orchids well rely on water quality, air movement and humidity. These three items are more important than what mix to use, how much light or how often to fertilise and spray with chemicals. If the air movement is right very few problems occur with fungi or bacteria, if the water is right the plants will produce sufficient food for themselves, and if humidity is right they will not dry out too much or overheat to any great degree.

Armed with the above information, I sought out a supplier who could give both good quality and who would be able to erect the houses for me, as I knew I would not have the time or resources needed to do it myself. I eventually settled on Fernlands Agencies, as they had both suitable products and were also very helpful. I decided on two separate nurseries for my needs, both measuring at 6 x 11 metres.

The next step was the tree removal and land works to arrange rain water tanks to be placed so that the entry point was lower than the gutters of the orchid houses. This meant semi-burying them into the sand to a 1/3 of their depth with a crusher dust base under them for support. Next was the preparation of the pads for the nurseries to run east/west so the long side of the nursery faced approximately north, and then the installation.

The nurseries were standard prefab size for Fernlands with 6 metres being a standard width. The length could be any size, going up in additional 2 metre lengths. The beauty of these nurseries is that they do not need to be cemented into the ground and can be relatively easily moved if needed. The nurseries are held down by burying the side material into the ground all



around by about one metre, which also means it is virtually insect proof, except for the doorways. I chose to have 1-metre-high straight sides added prior to the curved pipe forming the dome roof to give me some extra height

as Vanda roots can be rather long below the pots and the growth quite high above the pots. This additional height also just gives the whole structure a more functional shape and allows walkways along the outer edges of the houses if required. With ventilation in mind I decided to have 50% shade cloth sides and a fully weather proof solar weave dome top and ends. Both ends however have a large shade cloth covered opening in the high part of the dome to allow hot air to escape. Ventilation and temperature control were later improved by the addition of a thermostatically controlled extraction fans mounted into the roof of the dome.

The weather proof dome roof was strongly recommended to me to avoid the anticipated long periods of wet weather during the summer months, and to keep any chance of damage from the cold during winter to a minimum. Both houses are fitted with roll down solar weave side covers, which are activated automatically by controllers - based on temperature - which are mounted in the garage. These run on a thermostat which feeds the information back to the controller which has a range of options which would suit anyone. I chose to have these so that the small motor activated by the controller raise and lower the sides in my absence without me lifting a finger; these were a major improvement over the old manual versions that had been used previously in



Toowoomba. I also use two fans in both nurseries just to keep the air moving and assist in avoiding any fungal problems.

In went the benches and the hanging rails and finally the orchids arrived and moved into their new home.

Living close to the beach turned out to be a lucky break and not one that was planned in particular, however it certainly helps temperature control and humidity when the afternoon sea breeze kicks in and has been a real added bonus.

I have not installed any watering or misting systems at this stage, however they may become a future feature. Personally I like to water and fertilise by hand as it gives me the opportunity to view each plant as I move along. Doing so means I can see any problems that occur at an early stage so that corrective measures can be taken before it becomes a major problem. As the collection grows and time runs short I may need to water more efficiently as the personal touch is somewhat time consuming.



I am very pleased with the whole set up and the outcome. The plants seem happy and healthy so I believe I made some good decisions, which I am more than happy to share with anyone wanting assistance.

Rick & Bronwyn Emmerson