

How do my orchids survive while I'm away from home?

By Janice Heitman

Holidays for my husband Trevor and I are few and far between. We have always been reluctant to leave our orchids for more than a few days at a time for fear they would perish if not watered, fertilised and tended to daily. These past few summers in Queensland, where we live on the Sunshine Coast, have been especially hot and dry. This being not ideal conditions for unattended orchids, we have felt it to be far more beneficial, for our orchids, for us to stay home.

Last year in March however, we had the opportunity to travel with a group of like-minded orchid enthusiasts to exotic Taiwan. Attending the Taiwan International Orchid Show (TIOS 2018) at Taichung was the focus of the trip, and that was a much too exciting opportunity to miss out on. However, as the trip was 3 weeks in length, this posed a problem. How would our orchids survive while we were away from home? We set to thinking of a viable plan.

Even though we live on a small, suburban 600sqm plot, we have a large, mixed collection of orchids, including a large quantity of Cattleyas and Dendrobiums, also Vandas, Bulbophyllums, Phalaenopsis, Phragmipedium, Chysis and an assortment of some strange and unusual orchids due to my husband's eccentric tastes. The plants surround our house and pool area, with all areas open and 70% overhead cover.

Our neighbours had, in the past, watered our plants when we had been away for a couple of days. Although that had worked very well for a short amount of time, we decided against asking them to be responsible for our prized hobby for such an extended time. We did not have any other friends with horticulture experience that were close by and family were some distance away as well. Relying on Mother Nature seemed irresponsible, so it became exceedingly clear that we had to figure out an independent way to care for our orchids for our 3 week holiday.

We decided to construct an automated watering system. We had a small system already set up, but it had just a 20 L capacity. The original set up used bore water with a PH of 4.2. We used a Venture system to inject a concentrated solution of bi-carb soda to adjust the PH to 6.5, which seems to suit our plants. This solution is injected into the bore water with a calibration nozzle in the Venture. In summer when the weather is hot and dry we employ a fogging system at designated times during the day depending on the weather. This works well when we are home, as the reserve only needs filling every few days.



The 20 L supply tank and connections

This new system had to be much larger. Rather than a few days, this time the water reserve would need to hold enough to last almost a month. We didn't know if it was even possible to set up, but we gave it a go.

Being meticulous planners, we decided to err on the side of caution and devise a watering system that would hold enough for up to five weeks. This would mean starting by increasing the container's holding capacity to 150 L, but to still ensure it was compatible with the Venture system.



The new 150 L supply tank

By switching to holiday mode, it was set to water the orchids for 25 minutes each day, every day we were away, for in excess of 3 weeks.

We set up a fogging system which operated at 1 L per hour per nozzle, where the nozzles were set approximately 900 mm-1200 mm apart, depending on where they were situated in the orchid areas.



The direct on/off power source was controlled by a timer which we programmed to come on at 10.00 am each day. This would allow good spray coverage both under and over the plant leaves and we hoped Mother Nature would assist with some breezes.

Before we could use the system, all the nozzles had to be removed, cleaned and checked. My husband happily chose a hot day to do this, as the only way to ensure the system was working was to check it while in operation. I must say he was rather wet by the time he had finished!

The fogging system at work

And with a sigh of accomplishment, we were ready to start packing our bags. Our system had been planned, checked and rechecked. We were confident we had the correct ratios and all of the best equipment for the job. Time to start our wonderful holiday.

Taiwan is an interesting and exciting country to visit. We travelled with a group of 30 people and made some wonderful friendships over our 3 week journey. The food was probably the most challenging part, and some of the wonderful traditional dishes we saw included steamed lotus stems, fish ball soup and pigs blood rice pudding on a stick with a sweet peanut powder coating.

There were many flower markets, lots of beautiful jade carvings and Taiwan's pride and joy - their 101 building and of course the Orchid Show, simply stunning. Who could forget the sunrise at Alishan, which required getting up at 4:00 am in 0 degrees C and the Cruise across Sun Moon Lake to see the sunset. Our tour coordinator was named Madee and we also had a wonderful and entertaining Taiwanese guide named Simon. In an effort to share between our cultures, of course we taught Simon a little bit of slang, I mean, that is the Aussie thing to do!

While Madee was guiding us on our journey, we barely thought about our beloved orchids, knowing they would be well taken care of by the automated watering system, while we were enjoying our time away. Some group members googled the weather conditions and other updates from home. We learned that there had been one instance of rain, and as far as we knew, there was no news of storms or any other damaging weather types in our area.

All too soon we arrived home, feeling happy and relaxed, but slightly tired after such a long flight. Our first job was, obviously, to check the condition of the orchids. After 3 weeks away, with hot and humid weather, we knew the worst may have happened, but we were hopeful all the same. We both exhaled a long sigh of relief when we saw them. They all looked great – still alive, nice and healthy, beautiful green leaves, even some new flowers!

My husband went to check the water tank. He was eager to see how much water the system had actually used over the 3 week period, and assumed his calculations must have been pretty spot on. His cry of shock startled me and I ran over to see what was wrong. The 150 L tank was still absolutely, completely and utterly full! How could this have possibly happened? He checked over the equipment to try to figure out how on earth this was possible.

The mystery was quickly solved when we discovered that we had managed to leave the automatic timer's switch in the off mode, rather than turning it on. We had literally mucked up the first step of the whole process – **Turn the Machine On.**

The moral of the story is that maybe all of the expensive equipment doesn't really matter. Maybe orchids are hardier than we give them credit for. Maybe they will survive with only Mother Nature's help and finally, most importantly, maybe, just maybe, we can start planning another holiday...