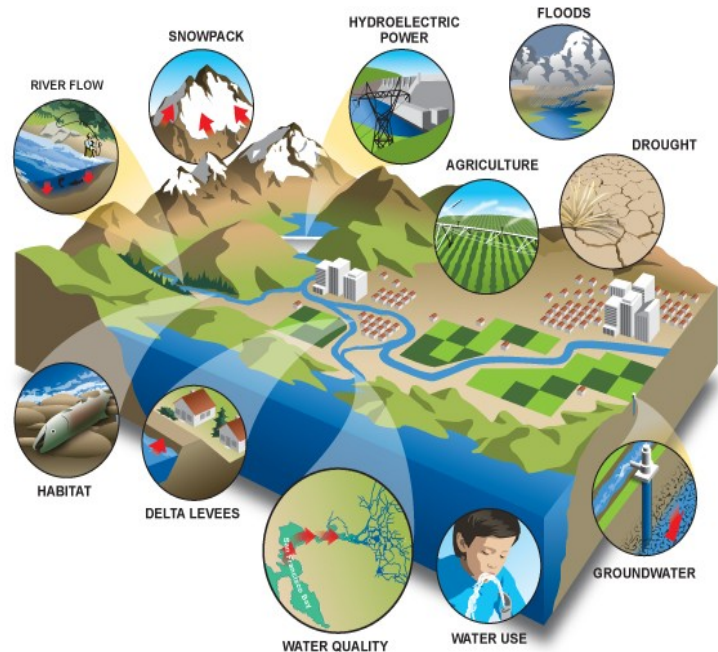


21st CENTURY POT CULTURE

By Barry Johnson ©

Why Pots?

Why would growing plants in containers in the 21st century vary from any other? Simply the current drought (in Victoria) or 'climate change' - take your pick or take both. In the days of yore when the precipitous heavens opened up often enough to water our gardens, pot culture was an easier exercise. I have steadfastly tried to be an optimist, believing that weather is cyclic and we're just experiencing another historical dry period. However, I must admit that my resolve and patience are being surely tested.



The steady downsizing of gardens through increased high-density living styles has brought container culture to the fore. Courtyard and balcony gardens, swimming pool surrounds, alfresco patio and decking areas have also increased in number and popularity. However, 10 plus years of horrendous drought, coupled with severe water restrictions have also made growing plants in containers more problematic. Let's split pot culture into elements to consider before heading off blindly down the road of the Plant Grim Reaper.

The Pot

First and foremost, our newly purchased plant was never designed to live in the plastic pot it came in. These pots were purely designed for propagation purposes which was done under strictly controlled and professional conditions. I'd like a dollar for every gorgeous plant that has left a nursery only to die a quick death or hang on a bit longer for a wretched existence and then snuff it.. Pot styles and colours should also form part of your landscape/decor design criteria. How often do you see a patios etc. festooned with a disparate array of containers which in turn makes for an overall chaotic affect? Select a colour, shape and style that compliments and enhances your existing or intended architectural and landscape elements. It doesn't matter if you employ a variety of sizes as this can add height diversity by eliminating the 'same-ol, same-ol' container look. In our climate I thoroughly recommend pots that are externally sealed or glazed which in turn eliminates or minimises evaporation via porosity. 'I loved the shape and it seemed like a good idea at the time!' This phase relates to all those people that bought a beautifully ornate, curvaceous, urn-shaped pot and thought they were doing their plant a service. Everything went along fine until re-potting time. Ever tried to get a plant out of one of these pots without resorting to total butchery? A four wheel drive with a bull-bar will suffice, but, it will be about as 'mission accomplished' as George Bush's Iraqi War.

Choosing pots with the wide part of its tapered outline at the top, not in the middle or bottom, is advised.



Seemed like a good idea at the time



Better shaped choices

If you have to have terracotta pots, try sealing the inside first. This can be done with plastic (don't cover the drainage holes) or, using a terracotta sealing paint. If economy dictates that you have to use plastic pots, at least buy decent quality, thickly molded ones. Your intended growing aspect can also influence your choice of pot. Obviously ones intended for pot plants growing out in full sun will need to have better insulating and water retention qualities than those sited in shady situations. The latter being a place that you could economise on if necessary. Remember, many pottery style containers have only one drain hole; so covering it with non-clogging pieces of broken pottery, tiling etc. will prevent it being 'bunged up' by compacting potting medium.

Pot Accessories

Growing camellias in ornamental, ceramic containers will also necessitate some spare parts. The first being some broken pottery, tiles etc. to carefully place over the drain holes, which, in many cases, may be only one. Pieces with slight curvatures will create a small space over the hole/s which prevents the potting medium from packing down into the hole and therefore restricting or completely stopping drainage. If the pot hasn't got them built-in, the second accessory would be pot feet. This not only assists in drainage but, in the case of pots to be located on timber decking etc. will prevent the timber from rotting underneath.



Broken pottery



Ceramic pot feet

The Medium

I'm not talking about your Swami or Taro card reader, but your choice of potting mix. Cheap, budget mixes (most soilless) are a no-no. If you want to eat tofu for every meal be prepared to look like a waif and die young. Plants are the same. Resigning them to a short life of desolate, under-nourished boredom will be equally terminal.

At least use potting mediums that carry the Australian Standard endorsement and preferably a premium one. In recent years I have noticed a serious rationalisation of potting mediums available. Once we were able to obtain a plethora of potting blends from the ridiculous to the sublime. For what ever reason (possibly takeovers) supplies seem mainly limited to standard (for natives), general blend and tub & terracotta. For our camellias an 'acid-loving' blend is still available and is one I would thoroughly recommend. At the nursery when people come in to inquire about their sick pot plants, the first question I ask is; "When did you last re-pot them?" Invariably, it was so long ago they don't remember or, at least many years. A potting medium, even if well cared for, is only good for two to three years maximum as, its original nutrients are depleted and broken down and its air to particle ratio reduces to such a point that it can become quite hydrophobic. Wetting agents can assist in keeping potting mediums hydrated during the summer months. Water holding crystals and gels mixed throughout the potting medium can also help but, don't overdo them. These can be very beneficial for growers that have to go away and have to leave their pot plants unattended for short periods.



The Plant



One basic rule is applying the right plant for the right situation eg. Sun versus shade visa vie north, south east or west. By way of example, camellias should be mainly grown in protected north, east and southern aspects. Ask yourself, is the intended cultivar suitable for tub culture? These considerations should apply for any plant intended for tub culture. Aesthetics is also an important consideration. Obviously, a plant that is too large for its container with look ungainly and unbalanced. It will also suffer from stability problems, especially from wind. Ceramic and terracotta pots have never bounced well.

The Fit

Most potted plants will rapidly decline in vigour if they are allowed to outgrow their container and become root-bound.

Container-grown camellias also do not like to be over-potted. This means, that if you buy a plant and would like to grow it on in a larger decorative pot, try placing the plastic pot within the larger one and burying it within the total potting medium. After every flowering season you can extract the plant from the plastic pot and if its roots are comfortably present against this container you can then pot it up to the next size plastic pot. You keep doing this until the plant's pot and root system is close enough to the side of the ornamental container to pot it up in its own right (without the plastic one). Again aesthetics is an important consideration. The plant size, colour and style should always be in symmetry with it's container and surrounds. A fully integrated and matching set albeit, of different sizes, is always a better option than a disparate array of odd bods.

The Vital Ingredient

The vital ingredient is one we haven't seen much for about 10 years; **water**. The greatest killer of pot plants is thirst. Another water-related problem that impacts on a plants performance is erratic watering. Consistency in your cultural practices when growing any plant is important, particularly in pot culture and this starts with your watering regime.



It's amazing how many people don't know they can employ a dedicated drip watering system to their pot plants or, add them as an extension to their existing garden drip system. This can be done by using 4 mm poly tubing inserted into your existing 13mm drip or feeder lines and then running them to your pots with drip emitters attached to the ends. I would suggest that at least 4 litre per hour dripper be used for pots. Larger containers may require teeing off the tubing for two or more drip emitters or, at the very least use an 8 litre per hr. dripper (equivalent to about one watering can).



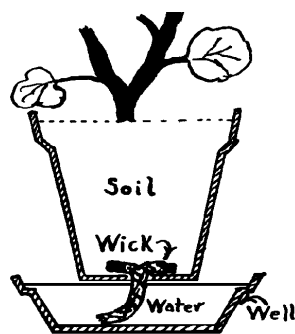
An example of a drip emitter



Example of connecting pots to drip irrigation system

Importantly, use barbed 4 mm connectors and not screw type as, these are much more secure and less likely to blow out. Using a harder grade of poly tubing and not the soft grade is less likely to come adrift from its fittings, particularly in hot weather.

I often employ these feeder tube watering system from a 13mm extension running under decking, so that the el fresco area can be enhanced with container plants.

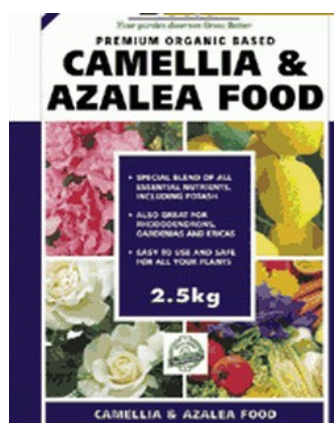


In the absence of a drip system, another worthwhile summer tip is to use a water-holding drip tray under the pot with a capillary wick back to the growing medium. This provides a water reserve and a cooling, evaporative environment around the plant. The tray can be removed during wetter or winter months.

Mulching of the top of the container will also minimise the evaporation of moisture from the potting medium. I prefer Lucerne as it provides 18-28% of nitrogen, naturally in its breakdown process and adds humus to the potting medium.

The Tucker

Another way of extending the life and viability of your potting medium is by having a timely, supplementary feeding regime for you pot plants. This will not only benefit the plant but, will slow down the process of the plant stripping all the nutrients out of the potting medium. The seasonal addition of slow release fertilisers such as 'Osmocote' will be of some benefit. I believe that potted plants take up liquefied fertilisers much more readily than solid ones and many of these can be used as a combined foliar/root application. These can be applied every 4-6 weeks during the plant's active growing season. However, do not apply them on days over 30C. Remember, slow release fertilisers such Osmocote only start to release their nutrients when the temperature exceeds 20°C so, adding them autumn through winter is just wasting it. Obviously, any flowering plants such as camellias require fertilisers with adequate potash content to promote and enhance flowering. Also remember that these slow-release prill-type fertilisers work on the principles of Osmosis ie. The combined effects of heat and moisture allows the resin-coated, prill to release controlled amounts of fertiliser over an extended period, not dumped in large, erratic hits. Therefore they should be at least mixed into the upper portions of the potting medium. Most new potting mixes come with it already added so, there is no need to add more in the first season.



Using the right stuff



Slow release fertiliser prills