

A Journey in Hibiscus Growing®

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My Journey started over 30 years ago when the employer I was working for was growing hibiscus and I became interested in the many selections. Over time he sold the retail part of his business, and I stayed with the new owner.

It was only a matter of time when I confirmed that I would rather grow plants than sell them. I expressed this to Ken, the owner, and we started Wallsend Wholesale Nurseries. At the beginning we grew indoor plants and camellias and bought and sold palms. After a period of time my previous employer retired from his wholesale nursery, so I decided to venture into the hibiscus that I liked and maybe fill the gap in the market place that he was going to leave.

To start with we grew plants on a section of the retail nursery in Wallsend, since it had growing areas from past years and some older glasshouses. After a couple of years we leased some land (2 acres) at Glendale, approximately 2 km from the retail site, and continued growing and expanding the business. The rest is history. After the 2 acres filled up I purchased 2 adjoining acres, and we now grow on about 3 of the 4 acres; the rest is house and gardens. I guess this is how a lot of us expand, by adding and changing over the years. After 25 years we changed our name to Glendale Select Plants, and we have just finished some smaller igloos for growing.

I mentioned igloos. As you can see I grow in a number of small igloos that house other plants as well as hibiscus, besides some general lines, including natives, introduced, and plant variety rights (PVR) plants. While hibiscus is our main plant we also grow other subtropical plants, e.g., *Duranta*, *Dipladenia*, *Acalypha*, *Breynia*, etc.

I often had thoughts of going north to the warmer climate, but family and other commitments kept me in Newcastle. I feel I have brought the north to me, because I have ideal conditions for growing hibiscus. Our land has a northerly aspect, is frost free, in a warm climate, not far from the coast and the Sydney Market, and plastic tunnel houses help.

There are a number of hibiscus species, namely *Hibiscus rosa-sinensis*, which are known as Hawaiian hibiscus, plus older evergreen long-flowering types (we call "hardy landscapers"). Hibiscus selections are used extensively in coastal areas as hedging and specimen plants, and in most temperate and cool climate areas the stronger, hardier growing selections are chosen. Some other hibiscus we grow mostly in smaller numbers are *H. syriacus* (deciduous and takes extreme cold), *H. rosa-sinensis* 'Cooperi' (coloured-leaf types), *H. tiliaceus* (a tree native to northern Queensland, excellent on the coast), *H.* 'Glaber' (a form of *H. tiliaceus* with copper-coloured leaves, an excellent small tree again for cold or coast areas and one that we have named with our own label 'Copper Aussie'), and *H. mutabilis* (hardy growing shrub with pink and white flowers on the same plant).

Now down to growing. This is a journey on its own; like many other plants there are ups and downs in the learning experience of growing, to adapt to your business and conditions.

I started propagating on benches with electric cable in those older glasshouses I mentioned, with the automatic misting with blotting paper. I had reasonable strike with most cultivars but having read and noticed in Europe how they struck hibiscus cuttings under plastic, I thought I would build a tent over the heated bench with misting — I lost the lot. Ours were hardwood cuttings and obviously theirs were soft tip without misting and grown in Europe, not temperate Wallsend.

However, with the knowledge I gained from reading, attending some seminars, joining the I.P.P.S., and coming to conferences, I started building igloos (polytunnels) for propagation.

With a small budget and the help of my boilermaker neighbour, we built a lot of the early igloos ourselves. The first two propagation houses, which we are still using after 25 years, I put together from my thoughts on propagating hibiscus and learning from conferences, etc. I decided to use hot water through PVC piping, setting it up on polystyrene in a manifold system with river sand around the pipe, and a thin layer of concrete on top. Heating was by a diesel-fired boiler on thermostate timing. There are six beds that can be used all at once or individually. For misting I wanted to have timing on and off in seconds. Nothing was available on the market at the time, so I contacted a local instrument mechanic, and he built me a microprocessor that would control the misting time in seconds. We are still using this system and the heating system, although we have repaired a few leaks in the PVC.

I decided to stick with tunnel houses but with higher sides and plastic to hold extra heat. This seemed okay and different from the plastic tent I had tried; these would have a lot more airflow. They are only 18 m long, which allows air movement. Under the plastic I placed Sarlon shade cloth to stop some heat and burning in the summer. Three years ago I changed this to form screens that I pull across on cloudy and cooler days to allow more heat retention.

Cuttings. Cuttings are mostly taken as hardwood in late winter/spring, except for some summer cuttings. I have tried a number of hormone products, including IBA and alcohol, gels, and other made-up liquids and powders, but have come back to the original Yates Rite-Grow Powder No. 4. Some cultivars, however, especially softwood, are okay without any treatment.

Propagation Media. Again I have used products such as coarse sand, peatmoss, pinebark, coco peat, vermiculite, ash, and perlite, all in varying mixtures, but have stuck with a perlite and pine-bark fines (7 : 3, v/v) mix.

I started propagating in 50-mm tubes and have tried community pots (roots are too brittle), net pots (did not break down and roots were confined), growool, peat pots (too wet and roots grow into one another), etc. I am not knocking these products, but they did not work for me; so back to the original 50-mm tubes. They take up room and we lose some cuttings, but because I am only growing for my own stock, we can bank up more stock on benches in holding igloos to grow in tubes ready for potting.

Rooted cuttings from tubes are transplanted into pots, mostly 140 mm, 200 mm, some 300 mm, and now I am looking at some larger sizes. Again, we have made some changes over the years with experience and the need to improve on efficiency and timing. Firstly, we had plants growing in black pots on the ground with a “chitter” base and weed mat over the top. We changed a few years ago to placing plants in coloured pots, basic colours, to make it easier for retail selling. This was fine except that the pots became a little dirty during growing, requiring extra work

cleaning before sale. I have now put gravel on the ground of all tunnels, especially for the 200-mm pots. This keeps pots cleaner and is better for drainage, and I feel the gravel keeps pots a little warmer. Being smaller, the 140-mm pots presented a problem with staff bending, so benches have been made. I had seen the idea of capillary watering using colour-bonded iron sheets, so I purchased some seconds of wall building sheets and set them on pipe framing. This lifts plants off the ground, spaces them so they bush better and are easier to work. For watering I have placed drippers at the end of slightly sloping benches. Pots are capillary based and placed alternatively on benches so that water moves around them.

We also use overhead watering, depending on the size of the plant and time of the year. Because hibiscus have large leaves, a reasonable amount of water is wasted with overhead irrigation. On the benches water falls between plants onto the bench and can be taken from the bottom by capillary as well as top watering. Excess water falls at end of the house into a drain and runs into our recycle tank, which we set up approximately 3 years ago.

Potting Mixture. Again, we have used various combinations, such as grey sandy soil; composted sawdust; 10-mm pinebark; composted rice husks, and coarse river sand. When products such as water crystals and SaturAid became available these were also used in our mixture, because hibiscus require more water during the warmer weather and must have good drainage especially during the winter months. We have had a couple of problems over the years mainly due to a combination and availability of potting materials causing bad drainage and lack of aeration, which has resulted in salinity and obviously poor growth.

After trialing coco peat with other materials we are now successfully using the following mixture: coir peat and coir bark, coarse pinebark with fines, and very coarse river sand (10 : 7 : 3, by volume). Because of the coir peat we do not use water retention products. Dolomite, iron sulphate, and Osmocote Premix are incorporated in the mix to a pH of 6.5 with Osmocote High K dibbled in when potting. Some supplementary liquid feed is used, especially in the winter.

Plants are watered every day or every second day in spring through to autumn, but in winter they are watered thoroughly once or twice per week, depending on the weather. Because we are growing under plastic we need to water thoroughly to flush any build up of salt through the potting mixture.

Remember I said I brought the "North" to me, and by growing under plastic we can control watering, protect from cold winds, and keep more warmth on the plants — especially during the day. We hold our plants over winter so they are solid and grow quicker in early spring, hopefully for earlier sales.

I originally thought about using rolling benches to be able to move plants from protected houses to semi-shade to harden for sale, but this was restricted by room and budget, so rather than moving plants we lift Igloo covers on and off as needed. Structures are covered with Sarlon, and plastic is placed over the top. I originally used green Sarlon, but a few years ago with the advent of other colours, I investigated the qualities of white and decided to replace all my green Sarlon. I have found that the plants grow and flower better under white Sarlon.

When we lift the plastic covers, generally in November/December, the Sarlon protects the plants in summer from the scorching heat and saving them from drying too quickly and against the advent of hail. Because hibiscus have large leaves it

only takes small hail to damage leaves when they are ready for sale. Whilst we are not in a bad area, we have had small hail twice in the last 2 years.

Hibiscus are time-consuming plants to grow. Our 140-mm pots are sold through spring with leftovers being potted into 200-mm pots late spring and sold through summer/autumn. Our 200-mm pots generally have a growing period of at least 12 months from a struck cutting. They are firstly grown in 125-mm pots and held until potted into 200-mm pots, which give us a more solid, bushy plant. During this time they need to be sprayed, some staking, maybe top fertilized, pruned if grown too tall, some weeding, and banking up selections within the igloos before selling.

After all this nurturing they are hopefully sent out to a good home through retail nurseries and landscape jobs.

Last spring we set up a display of hibiscus at the ABC Gardening Show at Homebush, mainly to promote hibiscus to the public. We have cultural notes available for customers and have just had a new catalogue printed.

I am getting older but I know that we have to change with the times so we plan to set up a website this winter. We are now on email, and I am always looking for ways to improve in my own modest way.

I know my nursery is not large compared to others I have visited but with a staff of eight, consisting of one full time Manager, seven permanent casuals plus my wife, Vicki, and myself I feel it is large enough for us to manage. Unfortunately hibiscus are not as popular in the market place as some other plants, but we are one of the largest growers of hibiscus on the eastern coast of Australia.

The I.P.P.S. certainly has helped me over the years. Whilst I feel you can never replicate other people's ideas you can adapt some to your circumstances. All my ideas may not be innovative, but I have changed other methods to suit my nursery.