



Heatons Nursery Using bottom-up irrigation & coir fibre growing media

In 1976 Don and Daphne established Heatons Wholesale Fern Nursery at Nambour on Queensland's Sunshine Coast based around their very extensive private collection of ferns. In 1997 Don and Daphne relinquished control of the nursery to son Peter and his wife Maree who continued to develop and expand Heatons Nursery. Fern production is still predominately based around spore collected from their own stock, with the addition of some imported tissue culture from Europe. Peter and Maree travel extensively overseas to Europe and Japan to identify new plant varieties, technologies and techniques for production. In 2002 Peter constructed their major growing facility designed for the production of ferns in containers for the retail market.

The glasshouse is 44 metres long and 14 metres wide providing 440 square metres of growing space for their 10cm, 14cm and 17cm container ferns. Roller benches have been installed increasing the plant carrying capacity by approximately 10% allowing 21,000 x 10cm, 10,500 x 14cm or 4,200 x 17cm container ferns at any time. The glasshouse is constructed with a polycarbonate roof, reducing the ultraviolet light levels making the shed cooler. The combination of the local climate and the polycarbonate roof create the ideal environment for fern production. Also installed in the glasshouse are moveable screens and growth lights to further manage the environmental conditions with the potential to improve plant growth by as much as 40-50%.

"We have a 10 fold water saving and our fertiliser usage has been reduced by 70% using bottom-up irrigation and our 50% peat moss and coir fibre growing media"

Peter Heaton 20.11.2012



Heatons Nursery Nambour Queensland

Heatons Nursery utilises coir fibre extensively in its production systems, a natural fibre extracted from the husk of coconuts. The 50% coir fibre and 50% peat moss growing media used in their container fern production along with the bottom-up trough watering has reduced throwouts to 1%, provided a ten fold reduction in water use and a 70% reduction in fertiliser application. Peter Heaton says the roller benches provide a 10% increase in capacity and a workspace at a suitable height for staff. The combination of growing media and bottom-up irrigation also ensures the glasshouse walls, under-bench areas and pathways remain dry, reducing cleaning, fungus gnats and disease issues. The growing media and watering system keeps the fern foliage dry reducing fungal outbreaks, a major problem in fern production.

Heatons Nursery is an accredited nursery under the Nursery Industry Accreditation Scheme Australia, NIASA and received EcoHort environmental certification in 2006.

Anthuriums produced from imported tissue culture are another major crop at Heatons Nursery. All Anthuriums are grown in 100% coir fibre growing media and irrigated by overhead sprinklers. The major benefit in the 100% coir fibre growing media is the less frequent irrigation requirement during production, for the retailer, and for the customer. Peter Heaton likes the environmental sustainability of coir fibre, its apparent ability to deter fungus gnats, the water holding capacity, its stability in not shrinking in the pot, and its light weight. Heatons Nursery is driven by a talented team of staff led by Gaven Potter.

Heatons Nursery was awarded 'Best Small Production Nursery' in Queensland in 2006 and received the National 'Best Small Production Nursery' award in 2007.



Nursery & Garden Industry
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The SEQ-IF program is a partnership between the Nursery & Garden Industry Qld. and the Queensland Government to provide on-farm support to growers in Water Use Efficiency and the Nursery Production Farm Management System through on-farm assessments, information support and training.

SEQ Irrigation Futures - Heatons Fern Nursery — Irrigation efficiencies