



**Nursery & Garden Industry
Queensland**



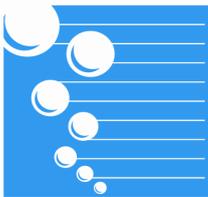
*“From the very outset
we have strived to
construct and expand
‘Award Plants’ to
industry BMP to
ensure the nursery
could consistently
produce quality,
healthy plants for our
customers”*

Marc Ward 25.07.2014

AWARD PLANTS Building to Best Management Practice

Award Plants is a fast growing production nursery located just off the Bruce Highway north of Brisbane. The business is owned and operated by Marc and Selena Ward and recognised as producers of quality flowering and perennial shrubs for the retail industry. The business is quickly gaining a reputation for the consistent quality of their product range and in particular the flowering Hibiscus and Mandavilla cultivars regularly supplied onto the market. Award Plants currently supply stock to independently owned retail stores, garden centres and chain stores in both Queensland and New South Wales.

Marc and Selena purchased the five acre site on Lomond Drive at Ningi in June of 2009 and began to transform what was an existing nursery into a profitable and sustainable production nursery. Today’s Award Plants bears no resemblance to the prior business as Marc and Selena demolished the existing infrastructure and other obstacles to upgrade the site using the nursery production BMP as the guide. Award Plants is not currently accredited under the Nursery Production Farm Management System but are endeavouring to ensure all improvements and upgrades meet the industry BMP standards in line with their long term plan of becoming accredited.



**RURAL
WATER USE
EFFICIENCY**

**IRRIGATION
FUTURES**

Improving irrigation management
for a profitable and sustainable future



Rural Water Use Efficiency—Irrigation Futures (RWUE-IF)

AWARD PLANTS

Building to Best Management Practice



“Our goal is to continue to grow ‘Award Plants’ and improve production techniques and infrastructure to industry BMP.

We recognised early that upgrading the site using the Nursery Production Farm Management System as a framework would ensure the business was profitable and sustainable into the future”

Marc Ward 06.11.2014

Sustainability is extremely important to Marc and Selena and their ‘Award Plants’ business. With a young family and financial commitments it was vitally important that the business be well positioned to continue current production targets as well as meet expansion plans.

Water supply was a challenging factor from day one and to support the expanding nursery a management plan was devised to improve water use efficiency. The current water requirement of 40 to 55 thousand litres a day (dependent on seasonal and weather conditions) provided some initial challenges. The water storage facility has been improved to hold approximately 3 megalitres of water and two 22,500 litre holding tanks were installed to support an automated chlorine disinfection system using a Grundfos liquid chlorine injector. Pumping was upgraded with the installation of a 1.6 kilowatt variable frequency drive Lowara multistage pump to supply the essential consistent flow and pressure to each of the newly improved irrigation zones. Sprinkler systems in each irrigation zone were upgraded and catch can assessments conducted to ensure the irrigation systems in each of the respective zones were operating efficiently to industry Mean Application Rate (MAR), Coefficient of Uniformity (CU) and Scheduling Coefficient (SC) parameters. The growing media has been adjusted to reduce the irrigation requirements of the crops by the addition of coir fibre. Currently the growing media contains up to 30% coir fibre to assist in container rewetting and moisture retention thereby decreasing irrigation requirements, reducing plant stress and improving production efficiencies. Growing pads have been upgraded to ensure nursery wastewater can be collected and directed to storage. Gravel beds direct wastewater through Ag and stormwater pipes to the newly upgraded drainage system of concrete and weedmat lined open drains. To ensure all the benefits of the upgraded irrigation and drainage system along with the changes to the growing media could be realised, irrigation scheduling has been made simpler with the purchase of a 24 station Hunter irrigation controller. The 24 station irrigation controller provides improved flexibility by managing all the irrigation zones providing quick and easy adjustment of irrigation run times and eliminating any possibility of competing zone irrigation.

AWARD PLANTS

Building to Best Management Practice



Marc and Selena are 'hands-on' within Award Plants and are supported by leading hand Nancy Finney and up to 3 casual staff during peak times. Current growing areas total over 5,500 square metres comprising approximately 3,900 m² of full sun production, 1,200 m² of shadehouse area and 350 m² of protected cropping. All growing areas have been upgraded to industry BMP with plastic underlay covered with 100mm depth of 20mm gravel. Five hundred and fifty square metres of the full sun production area is benched using concrete reinforcing mesh and irrigated efficiently through drippers. Almost all of the 140mm production is grown in shuttle trays to ensure the containers are supported to stay upright and for improved manual handling efficiency. High water use crops such as Hibiscus are grown in the waterwell shuttle trays during summer to further reduce irrigation requirements.

"We use an external specialist to monitor our irrigation and drainage water and growing media quality and employ a consultant to conduct pest and disease checks "

Marc Ward 06.11.2014

External consultants are used to regularly test and monitor the irrigation and drainage water and the growing media along with pest and disease monitoring of the nursery crops. Growing media storage has been upgraded and new potting benches have been fabricated to support the increased potting production requirements. A Dosmatic fertiliser injector provides the nursery with the versatility to fertigate as required to manipulate crop growth to meet production requirements. Recent investment in a Yanmar 32hp tractor to manage the growing media and a forklift to support bulk handling in dispatch has improved nursery efficiency.



Award Plants Building to Best Management Practice

Award Plants has progressed a long way over the previous five years transforming the site into an efficient and sustainable production nursery. A new 42m by 22.6m Hibiscus production area is currently under construction to provide an additional 950 square metres of growing area under cover. This area should provide an ideal growing environment for the Hibiscus crop providing protection from the elements as well as reducing irrigation requirements. The current drip irrigated growing area is also planned for expansion increasing the growing area to 1,000m², however this involves major site and drainage works. Bench construction in many areas of the nursery is continuing as resources permit so as to provide improved air circulation around the crops, better drainage and a superior work space. Water security is a continuing priority issue with plans to investigate growing media amendments to reduce plant irrigation requirements, continue site drainage upgrades to return wastewater to storage, improve irrigation scheduling to reduce water applications and improve site storage facilities. Potting efficiency is also targeted with plans to purchase a potting machine to increase output and free up nursery resources currently dedicated full time to the manual potting system. Award Plants continue to obtain the benefits from upgrading to industry best management practice through increased production, reduced plant losses, less inputs and a more workable environment.



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Nursery & Garden Industry Queensland



Queensland Government The RWUE-IF initiative helps irrigators make better use of their on-farm water supplies, through efficient irrigation system design and management. It also helps irrigators to reduce energy consumption associated with their pumping applications. RWUE-IF is a partnership between the Queensland Government and major rural industries, where the government provides financial support to assist industry groups in providing services to irrigators.



Improving irrigation management for a profitable and sustainable future