

NURSERY PAPERS

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WHAT TO EXPECT FROM CURRENT R&D PROJECTS

The end of 2015 marked the beginning of a swag of new research and development (R&D) projects that benefit and support the nursery industry. In this Nursery Paper we will take a look at how R&D priorities are set, what the current projects aim to deliver and how anyone can put forward new ideas for funding to investigate critical issues affecting the industry.

Summary

- New research and development projects have been funded in the key areas of biosecurity, tree stock balance and the 2020 Vision.
- A communications project is in place to get the key messages out to industry.
- Strategic Investment Advisory Panel announced for the nursery industry.
- Projects rely on support from everyone in the industry – being involved is rewarding for you and your business.
- Hort Innovation has a new online ideas portal that anyone in the industry can use to suggest R&D priorities.

EFFECTIVELY COMMUNICATING R&D OUTPUTS

Horticulture Innovation Australia Limited has recently funded five new projects that directly benefit the nursery and garden industry. Summaries of these projects are provided on the following pages.

These projects fit within the strategic investment plan for research, development and extension projects that:

- address key environmental issues
- identify opportunities for growth
- enhance best management practice
- build stakeholder collaboration and partnerships
- drive industry innovation, expertise and knowledge.

The communication and extension of R&D project outputs and recommendations is an important function of Nursery & Garden Industry Australia (NGIA). The new 'Communications program for the Australian nursery industry 2015–2018' will deliver these outputs and recommendations through a variety of familiar and new channels, including Nursery Papers, the Your Levy @ Work website and e-newsletter, the NGIA website, articles in industry publications, posts on social media platforms, case studies, videos and information kits outlining representative and levy arrangements for the nursery industry.

Central to the delivery of this project will be collaboration between NGIA and public relations company Cox Inall Communications.

SETTING R&D PRIORITIES FOR THE NURSERY INDUSTRY

Hort Innovation is assembling Strategic Investment Advisory Panels for each of its industries to provide advice on research and development activities funded by industry levies, and matching funds from the Australian Government.

The skills based panels are comprised of industry supply chain stakeholders, the majority of whom are to be levy paying growers.

The Strategic Investment Advisory Panel – Nursery Industry will meet at least twice each year, will operate within clearly defined objectives and be guided by the strategic priorities set out in the industry's strategic investment plans.

Putting forward R&D ideas

Hort Innovation has established a new way to capture ideas and concepts from anyone interested in furthering the capacity and knowledge base of the nursery industry.

An online form, open to the public, provides a straightforward method to submit a proposal into the pipeline of research and investment concepts.

<http://horticulture.com.au/about/investing-is-our-business/concept-proposal-form/>

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CURRENT RESEARCH PROJECTS IN SUMMARY



EVALUATION OF NURSERY TREE STOCK BALANCE PARAMETERS (NY15001)

Root to shoot balance is considered central to the rapid establishment and successful growth of tree stock used in landscape planting.

The characteristics of high quality tree planting stock are well known, and a voluntary industry standard is in place (AS2303:2015 Australian Standard Tree stock for landscape use). However, the impact of species differences and climatic conditions is less well understood, especially for high-value container and ex-ground tree stock.

A team of researchers at the University of Western Sydney's Institute for the Environment (HIE) is working to fill this knowledge gap through a review of international and trade literature, and field studies with nursery growers throughout Australia.

They will collect quantitative baseline data on the regional differences in root to shoot balance of tree planting stock and the corresponding performance of those trees, working with two or three production nursery businesses in each of the mainland states.

At each site they will survey at least five tree stock species from three categories: 1) tall, slender species that are typically faster growing; 2) general species with average form and growth rates; and 3) stockier or thick-stemmed species that are typically slower growing.

This will enable the team to provide industry with guidelines to achieve consistent, high quality results when planting tree stock grown in different regions in Australia.

The outputs from this project will include:

- root and shoot balance look-up tables to check that nursery stock conforms to the Australian standard (AS2303:2015)

- a comprehensive review of horticultural and forestry science literature
- research reports and communications briefs of the recommended best practice
- peer-reviewed articles in scientific and trade journals.

Of most practical use for growers and the extended value chain will be the root/shoot balance tables.

BUILDING THE RESILIENCE AND ON-FARM BIOSECURITY CAPACITY OF THE AUSTRALIAN PRODUCTION NURSERY INDUSTRY (NY15002)

Biosecurity in the production nursery setting continues to be a high priority for R&D projects, due in part to the industry's inherent exposure to plant pest and disease incursions.

Being 'on the front foot' at the 'front line' is considered to be the most pragmatic approach to biosecurity, and previous projects have seen over 800 people from the nursery industry participating in training workshops.

Researchers from the Department of Agriculture and Fisheries, Queensland entomology and plant pathology teams will lead this new project through to December 2020.





The practical outputs that production nursery businesses can expect from this project include:

- a variety of tools to assist in the early detection and diagnosis of potential pest infestations (be they exotic or domestic), making management and eradication more effective
- training opportunities (in person and online) for business owners and staff to increase their knowledge and understanding of practices that reduce the likelihood of pest and disease outbreaks
- expansion of the Pest Identification Tool for Insects, Beneficials, Disease, Disorders and Weeds of Nursery Production
- 10 free diagnostic samples to all NIASA businesses each year and significant discounts on diagnostic services for all nurseries
- new resources in the form of factsheets, Nursery Papers and articles in industry publications.

NATIONAL NURSERY INDUSTRY BIOSECURITY PROGRAM (NY15004)

A new national biosecurity program will secure better market access and safeguard the industry from the potential effects of plant pest incursions.



The first six months of the program will focus on bringing together the wealth of biosecurity resources that the industry has already generated, including the Nursery Production Farm Management System (NPFMS) governance documents, electronic audit platforms and manuals.

At the production level, BioSecure HACCP will be the centrepiece of the program. BioSecure HACCP is a pest management system and certification program with online document management and certification, which will promote more flexible market access for certified businesses. Certified businesses will benefit through smoother interstate trade and improved negotiation with the Department of Agriculture and Water Resources – Biosecurity (formerly known as AQIS).

Over the next few months the project team will survey growers currently involved in the NPFMS across Australia to assess their interest in adopting BioSecure HACCP. The survey will collect ideas and identify growers who are willing to contribute to the planning phase of the project and guide the construction of the market access resources that will be required.

NGIA is the lead agency for the National Nursery Industry Biosecurity Program, which will run until December 2020.

The practical outcomes that can be expected from this project include:

- a national MoU signed, recognising BioSecure HACCP as a national legal market access instrument in participating Australian jurisdictions
- negotiated market access implemented across Australia for all participating jurisdictions relevant to nursery stock and Entry Condition Compliance Procedure (ECCP) developed, approved and implemented
- training packages available to growers via a web-based platform for each ECCP
- at least 50 businesses BioSecure HACCP certified and actively engaged in market access through the electronic NGI Audit Management System (AMS)
- continued work at a government and policy level to increase the level of biosecurity preparedness of the nursery industry
- improved industry biosecurity awareness (delivered partly through the NY15002 project).



CAPACITY BUILDING WORKSHOP FOR THE 202020 (NY15007)

The 202020 Vision Strategy aims to have 20% more green space in urban areas by 2020.

Republic of Everyone is leading this new capacity building project to hold two Urban Forest Masterclasses in Australian cities, following the success of two sessions in Perth and Melbourne previously, involving personnel representing 70 urban local government areas (LGAs).

The ultimate aim is to encourage all 139 urban LGAs to plan and implement an Urban Forestry Strategy, which is considered one of the major projects within the 202020 Vision Plan.

The speakers at these events are chosen to address specific issues and ideas relevant to the locality, with sessions designed to achieve rapid transfer of practical information and to encourage discussion amongst participants regarding ways to increase and improve the green space in urban areas.

The practical outcome of this project for nursery businesses is the increased awareness amongst councils, planners and developers of the value of providing more green space in existing and newly developed urban areas, and the subsequent increase in demand for a variety of plant types.

EXTENSION OF BARRIERS TO ADOPTION OF 202020 VISION GOALS (NY15008)

In 2014, Hort Innovation engaged project consultants Josh Byrne Associates (JBA) to identify barriers to the adoption of 202020 Vision Goals (NY14007), including regulatory barriers, planning constraints and implementation difficulties.

Republic of Everyone will lead the current project to identify practical solutions to those policy constraints.

The project will focus on gaining a deeper understanding of the regulatory and planning processes that LGAs follow when making decisions about urban green space and how to influence the relevant regulatory and legislative levers.

The practical outcomes of this project will be proposed solutions to the constraints LGA planners and policy makers currently face when making decisions about increasing the area allocated to, and the type of, green space projects.

The resources generated through this project will assist the nursery industry in their campaign to achieve the 202020 Vision for urban green space in Australia.

LINKS TO RESOURCES

Tree stock standard AS2303:2015 Australian Standard Tree stock for landscape use. Available for purchase from SAI Global: infostore.saiglobal.com

202020 vision website: <http://202020vision.com.au/help-centre/growers-hub/>