

August 2018

This newsletter is an output of HIA Project CH16000 - Communication and adoption program for the Australian Chestnut industry



Chestnut Industry News

2018 COMING EVENTS

- **Tri-Nut Conference – September 7th – 9th, George Kerferd Hotel, Beechworth, Victoria**
- **CAI AGM/Industry Forum – Friday 7th September – from 1:45pm – George Kerferd Hotel, Beechworth, Victoria - please register your attendance**

Technical Adoption Officer Report Orchard Sanitation

Now that harvest is over, and Winter is nearing an end it is time for the orchard spring clean. For diseases there is a common management strategy in addition to chemical control methods – orchard sanitation. In all cases, low level of pests can be largely eliminated by sanitation, BUT if sanitation is ignored the pest gains a major foothold in the orchard.

Orchard sanitation is essential to manage any residue pests and diseases within the orchard trees and/or orchard floor. Also, it is a great time to combine that with mulching and the addition of organic matter back into the soil. Insect pests and diseases can survive over winter in chestnut buds, and in lesions on infected fruit, rachises, leaves and twigs that remain on the tree, or on the orchard floor. It is very important, albeit expensive but shake or re-shake your trees to remove all infected nuts and burrs.

Nut Rot

The findings of past studies have shown that the key to reducing the incidence of Chestnut Rot is through improved orchard hygiene. Perithecia and ascospores of the Chestnut Rot organism were found growing as a saprophyte on decaying burrs on the orchard floor. Ascospores were determined as the primary source of inoculum in the infection of chestnut flowers, leaves and stems in December. Targeting the perithecia and ascospores on burrs is therefore critical for controlling the disease.

Recommendations for targeting infected burrs include:

1. Removal of burrs from the orchard floor
Removing and disposing of the primary

source of inoculum will reduce the infection of chestnut flowers during the flowering period.

2. Mulching over top of burrs
Placement of a thick organic compost layer over top of the burrs to provide a physical barrier to ascospores. Organic mulches have also been found to contain antagonistic microbes that reduce the activity of pathogens such as *Phytophthora cinnamomi* Rands (You and Sivasithamparam 1995). This method has been particularly successful with *Persea americana* Mill. (Avocado) (You and Sivasithamparam 1995). Perithecia and ascospores are microscopic and can exist on very small fragments of decaying burrs and branches. Therefore, the layer of mulch would have to be thick enough and evenly spread enough over top of burrs to have a significant effect on blocking ascospore movement.
3. Biological control
Biological controls and antagonistic fungi such as *Trichoderma* and *Gliocladium virens* Mill. Giddens and Foster have been found to reduce the activity of chestnut diseases such as *Cryphonectria parasitica* (Chestnut Blight) (Arisan-Atac et al. 1995) and *Phytophthora* Root Rot (Chambers and Scott 1995). *Trichoderma* based products are available in Australia including 'Tri-D25' which is a mix of *Trichoderma koningii* Oudem. and *Trichoderma harzianum* Rifai. (Zadco 2011).

Orchard biosecurity – looking for pest and diseases

While the tree is dormant it is a good time to inspect the trunks and branches for any cankers and/or wounds and undertake the appropriate measures. Orchard biosecurity is a set of measures designed to protect a property from the entry and spread of pests.

Orchard biosecurity is your responsibility, and that of every person visiting or working on your property.

Through the implementation of orchard biosecurity measures, growers play a key role in protecting the Australian chestnut industry from exotic pests. If a new pest becomes established in your orchard, it will affect your business through increased orchard costs (for monitoring, cultural practices, additional chemical use and labour to apply them), reduced productivity (yield and/or quality reductions) or loss of markets.

Early detection and immediate reporting increase the chance of effective and efficient eradication.

Chemical Properties of Greek Stump Chestnut (*Castanea sativa* Mill.)

This paper deals with the investigation of chemical properties (electrical conductivity, pH, buffer capacity, minerals) of the species *Castanea sativa* Mill. The quantitative determination of the extracts soluble in hot water and dichloromethane was conducted using a Soxhlet device and according to the American Standards ASTM D 1110-84 and ASTM D 1108-84, respectively. The results showed that Greek Chestnut is rich in nutrients and organic chemical compounds, which can have pharmaceutical applications, and can be used in food technology, cosmetics, natural health or skin care products. This is the first attempt to record the chemical characteristics of Greek Chestnut.

Trevor M Ranford

Technical Adoption Officer

Chestnuts Australia Inc.

Position funded as part of Project CH16000

Hort Innovation announces new CEO

The Hort Innovation Board is pleased to announce the appointment of Matt Brand as the Rural Research and Development Corporation's new Chief Executive Officer. Mr Brand will take office in early September 2018.

Mr Brand brings a wealth of experience, most recently from his previous role as the long-term CEO of NSW Farmers, Australia's largest state farmer organisation. In this role, he drove a strategic, structural and cultural change agenda within NSW Farmers, since he took the position in late October 2010.

He has also held senior marketing, commercial and sponsorship roles in the 'fast-moving consumer goods' industry and professional sport, and is a member of the Australian Institute of Company Directors.

Hort Innovation Chairman Selwyn Snell said Mr Brand was a formidable choice based on his long-standing commitment to Australian agriculture and his qualifications across agriculture science and marketing.

"Mr Brand has a solid track record of strong agricultural organisational leadership and driving a strategic change agenda - these attributes made Mr Brand an excellent choice to lead Hort Innovation into the next phase of its exciting future," he said.

"Mr Brand has made an outstanding contribution while heading up NSW Farmers, repositioning the company to reflect a more modern-day approach to a member-based organisation.

"I look forward to welcoming him formally to the role when he takes office early in September this year."

Mr Brand succeeds CEO John Lloyd, who led the company through a challenging yet successful transition from the previous Horticulture Australia Limited to Hort Innovation in 2014.

Sally Holmes, Executive Head of Governance and Risk and Company Secretary, will take on Acting CEO responsibilities from July 9, during the interim period before Mr Brand's commencement. Hort Innovation is the grower-owned, not-for-profit, research and development corporation for the Australian horticulture industry. It delivers more than \$100 million in research, development and marketing activities each year with funding from the Australian Government, grower levies and other sources.

Hort Innovation Review of Performance Release of the review

- The independent Review of Performance on Hort Innovation has now been released. Hort Innovation has responded

to, and accepted, all 14 recommendations of review.

- The review has provided another solid bank of evidence around what Hort Innovation is doing well, and what we could continue to improve. It was also an additional opportunity for our stakeholders to give us considered feedback around how the organisation is performing and what opportunities there are to work better together for the future of Australian horticulture.
- Hort Innovation would like to thank everyone who gave their time, insight and critique of the organisation's performance, helping shape the review.
- You can find a copy of both the review and Hort Innovation's response to the recommendations on the Hort Innovation website
<https://horticulture.com.au/response-and-implementation-plan/>
- Anyone with any questions is encouraged to contact Hort Innovation at communications@horticulture.com.au

More on the review

In December 2017, following a competitive tender process, GHD was contracted to carry out the four-yearly independent Review of Performance on Hort Innovation.

The review is a requirement under the company's Statutory Funding Agreement (SFA) with the Australian Government, and also an opportunity to gain important feedback on progress and delivery over the four years since the incorporation of Hort Innovation.

The initiatives outlined in the Company response to the review will form an ongoing program of work for Hort Innovation and help to inform the negotiations around the next SFA between the Australian Government and Hort Innovation, in the continued effort to support the productivity, profitability, and competitiveness of Australian horticulture.

Have your say - Australia's Nation Brand - Digital forum

To make sure that all industries are represented in the development of the Nation Brand and we'd

appreciate it if you could take 15 minutes to register and give your insights through our digital forum. On the digital forum you will find case studies and background information about the process, as well as a short survey for you share your insights.

To have your say, please click here or copy this address to your browser:

<https://nationbrand.engagementhub.com.au/client/register>

Please feel free to share this link on your social networks as well, along with the hashtag #NationBrand

If you have any questions, please contact

Kate Murray

Marketing Adviser, Australia's Nation Brand

Australian Trade and Investment Commission (Austrade)

kate.murray@austrade.gov.au

www.austrade.gov.au

Reminder: see your levy at work with Hortlink!



Hortlink provides a quarterly update on all new, ongoing and recently completed levy-funded activity across each of Hort Innovation's levy funds. As well as project updates, resources and results, you'll find case studies, industry contacts and more. If you missed it, the latest digital edition was released on June 30 at www.horticulture.com.au/hortlink-2018-edition-2.

Big bucks to boost biosecurity

An extra \$18.1 million has been allocated for more boots on the ground at international ports. Australia's frontline biosecurity activities just got a boost following the Australian Government's announcement of \$137.8 million in additional funding. The investment will fund new biosecurity initiatives as well as strengthening some existing programs.

Some of the new measures include a \$25.2 million Biosecurity Innovation Program that will invest in new smart technology, such as underwater drones to check for exotic pests on the undersides of ships and X-ray technology to

scan passenger baggage more quickly at airports. A further \$36.5 million will be allocated for a team of biosecurity analytics specialists to help pinpoint which passengers, countries and imports are likely to bring in pests and diseases.

\$7.6 million will fund an ongoing Environmental Biosecurity Protection Officer and staff, within the Department of Agriculture and Water Resources. The officer will prepare plans and invest in projects to keep out environmental threats—such as the Asian black spined toad, which is similar to the cane toad but could potentially spread further throughout Australia.



An extra \$18.1 million has been allocated for more boots on the ground at international ports.

The existing Indigenous Biosecurity Rangers program will receive a further \$33.5 million over the next five years to employ 69 groups of Indigenous Rangers across some 10,000 km of northern Australian coastline. The amount includes training for an additional 13 Torres Strait Islander groups. These rangers are a frontline defence for our agricultural industry and environment by keeping out invading pests and diseases.

And should an exotic threat get in, we have also set aside \$35 million in contingency funding, ready to go if we do face an incursion we need to stamp out.

This new funding comes on top of the \$145.9 million of funding already allocated to biosecurity investment over five years in the recent budget.

This funding included \$107.8 million for:

- enhanced assurance and verification activities to strengthen the enforcement of our strict standards
- monitoring overseas pests and diseases to reduce the risk of them getting to Australia
- more surveillance, monitoring and response around our ports

- keeping our vaccine bank ready for the risk of foot and mouth disease
- the Australian Animal Health Laboratory and its vital testing for exotic pests and diseases.

The department has also allocated \$18.1 million for more boots on the ground at international ports over the next five years, with around 35 extra officers inspecting passengers' baggage and performing other tasks. An additional one-off amount of \$20 million has also been allocated to support Tasmanian fruit growers impacted by the fruit fly outbreak. These new and existing funding measures increase the government's commitment to biosecurity to a total of \$313 million over the next five years.

Find out more about the Australian Government's biosecurity priorities go to

<http://www.agriculture.gov.au/biosecurity/aus-gov-biosecurity-priorities>

'Heart Health' General Level Health Claim (GLHC) under discussion with the Nuts for Life Management Committee

A decision has been made, as follows:

Following discussions on the issue of expanding access of the Nut Heart Health General Level Health Claim beyond a contributor's own brand, the Nuts for Life Management Committee resolves to allow access to the following:

- Major retail brands (e.g. Woolworths, Coles, Aldi), where their brands are packed/supplied by Nuts for Life contributors
- Products/brands that are packed by Nuts for Life contributors

There is no expectation that the third party must become a member of Nuts for Life, although this is preferred.

It will remain that the company making the claim (i.e. the third party) is required to sign the Licence Agreement with the Australian Nut Industry Council (ANIC) and that it is the responsibility of the company making the claim to satisfy all legal requirements, including notifying FSANZ of their intent to make a GLHC.

Please don't hesitate to contact Belinda Neville, Nutrition Program Manager at Nuts for Life should you have any questions. Phone 0406 302 237 or email nutrition@nutsforlife.com.au

"Sustainable Organics"

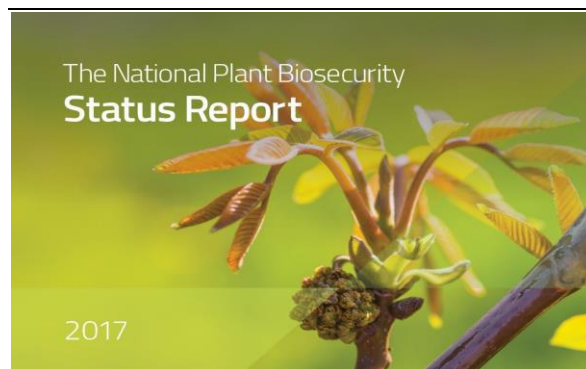
Improving certified organic production techniques in the Australian industry to provide consistency for the end consumer

By Nathan Free, Nuffield Scholar from Lake Boga, Victoria

Key points:

- This report focuses on the sustainability of Australian certified organics and improving production techniques to provide consistency for consumers.
- Certified organic agriculture in Australia has a great future if producers can adopt practices and processes followed in other parts of the world.
- A crop rotation plan that combines business and personal goals, financial stability and development of healthy soils is paramount.
- Groups of likeminded farmers collaborating can help trials be developed, kept local and specific to the region and can produce relevant results and new ideas for all.
- For the production of most organic broadacre or row crops, the addition of a blind cultivator can be used in a number of different scenarios throughout the crop's life.
- Correctly preparing the soil before planting enhances the three main aspects to soil health – physical, chemical and biological – and will result in sustainably grown, profitable crops.
- Developing a national, regional and local sustainable organic farmer group is an essential part of the development of certified organic in Australia.
- Sustainable organic businesses need to search for new or existing knowledge to improve or maintain their businesses goals and future profitability.

<http://nuffieldinternational.org/live/Report/AU/2015/nathan-free>



2017 National Plant Biosecurity Status Report now available

The tenth edition of the National Plant Biosecurity Status Report has been released this week by Plant Health Australia and is available **HERE**.

The report is a guide to how Australia protects itself against exotic plant pests and diseases and reveals the tremendous effort being made across the country to sustain our plant industries, unique ecosystems and standards of living.

This year the report displays the system through the three layers of protection: pre-border, at the border and post-border, with examples of how this works in specific circumstances. It details the efforts being made by everyone involved in plant biosecurity, be they the Australian or state governments, industries, research agencies and the community.

The report showcases the investment of \$200 million in improving biosecurity surveillance and analysis through the Australian Government's Agricultural Competitiveness White Paper to allow better target critical biosecurity risks and help improve market access for Australian producers.

It also highlights hundreds of scientific projects around Australia being undertaken by researchers and funders seeking to solve challenges affecting plant industries and our unique environment. Each project sheds light on some aspect of plant or bee biosecurity that will inform better management of pests, crop production and the environment.

To compile this edition, contributions were made from some 90 organisations and individuals.

Low women in agriculture figures ignite scholarship call

Following the release of figures that show men outnumber women more than two to one in Australia's agriculture industry, Hort Innovation and Women & Leadership Australia (WLA) have put the call out for expressions of interest for dedicated course scholarship opportunities.

Labour Force figures released by the Australian Bureau of Statistics recently show out of the nation's 329,600 people working in Agriculture, Forestry and Fishing, just 30 per cent are female. Hort Innovation chief executive John Lloyd said the figures served as a timely reminder that the organisation, with WLA, is offering 20 scholarship course positions for women with varying leadership experience, and applications are now open.

"The agriculture industry is becoming increasingly aware that diversity significantly underpins the sector's long-term growth, profitability and sustainability," he said.

"Working with WLA, and women leaders in the horticulture industry, we are working to help empower more women by giving them the tools needed to support long and profitable careers in horticulture."

He said more than 20 women in the horticulture industry had input into these dedicated courses, following feedback that women want affordable access to women's-only development programs, to expand their professional networks, boost their theoretical education and enhance their practical leadership skills.



Current participants Olivia Grivell, Leticia Gosse and Anne-Maree Boland

The initiative provides three different scholarship opportunities. Each year, 10 scholarships are available for emerging women leaders, five for women working in mid-level management and five for women working at a senior and executive level.

Leticia Gosse, a soil and plant performance company executive who is undertaking one of the courses as part of last year's intake, said the experience is invaluable.

"In this industry, I am lucky to be part of our family business where myself and other women have

been encouraged to step up and take on leadership roles. Only after participating in the Women in Leadership course did I realise how unique my experience has been, and the positive difference that this support can have on developing leaders," she said.

"For my sister and I, our hands-on knowledge was limited to our exposure with the family business. When it came to succession planning, we felt it was important to look externally for executive support, grow our networks, and we wanted to know more about how to build our team of people to build the business.

"The course has afforded us the knowledge, courage and support to not just take on the running of the business, but also expand our team and operations."

Both Hort Innovation and WLA will co-contribute to the scholarship for participants, which reduces the cost of participating by around 60 per cent. WLA Program Director Suzi Finkelstein said the scholarship program is a first-of-its-kind for the industry in Australia.

"We are extremely proud to co-invest with Hort Innovation. This is a sustained developmental project that will transform the lives of many women right throughout the sector."

For more information and to apply, go to <https://www.wla.edu.au/>

This initiative is being delivered as part of the Hort Frontiers Leadership Fund.

The Frontiers Consultation paper is now available on the Hort Innovation website

The purpose of this paper is to elicit feedback on the research themes within the existing 7 Frontiers Funds, and use this information to build individual strategic Investment Plans, to replace the current Strategic Intent documents.

It is the 1st step in a process that will enable the creation of Frontier SIPs (similar to those available in Strategic Levy funds).

To learn more, go to

<https://horticulture.com.au/our-work/hort-frontiers/>

