

International Year of Plant Health



2020 is International Year of Plant Health, a declared initiative being led globally by the United Nations' Food and Agriculture Organisation.

Although Australia's stringent biosecurity measures and practices have helped protect our plants and the environment from many of the world's most destructive plant pests, the threat is constant and evolving.

According to the Australian Chief Plant Protection Officer Dr Gabrielle Vivian-Smith, global traffic and trade are rapidly increasing, in the next five years the number of shipping containers arriving into Australia is predicted to rise by 75 percent. Even today, pests are discovered inbound to Australia on a daily basis, many of which could have devastating effects on the greenlife industry and even the broader Australian economy.

This Nursery Paper provides context on the importance of plant health and the opportunities that International Year of Plant Health offers industry. It also provides practical advice on how you can get involved in this global movement without needing to leave your business.

SUMMARY

- Although COVID-19 may have affected some of the planned International Year of Plant Health activities, there are many ways to still get involved.
- According to the UN Food and Agriculture Organization, each year plant diseases cost the global economy around US\$220 billion annually and invasive insects cost around US\$70 billion.
- One of the main 'offenders' is *Xylella fastidiosa* which is exotic to Australia and every effort must be made to keep it out and reduce its impact around the globe.
- The nursery industry, with other plant industry partners and Federal, State and Territory Governments, have worked to respond to plant pest incursions like Citrus Canker, Tomato Potato Psyllid and Fall Armyworm in recent years.

- Our industry has a number of best practice schemes for growers to implement on farm to manage plant pests and accreditation through the Australian Plant Production Standard (APPS) can help address this.
- All production nurseries should have a Biosecurity Plan and having a copy of the BioSecure HACCP guidelines as a reference point will help achieve this and improve plant protection practices.
- Adopting a structured plant protection and biosecurity system at the cropping level will deliver significant results including reduced wastage, lower costs, less pesticide use and more than 5% productivity improvement averaged at more than \$20,000/ha.

BACKGROUND

The United Nation's General Assembly declared 2020 as the International Year of Plant Health (IYPH) to raise awareness among the public and policy makers of the importance of healthy plants.

The theme of the year is 'Protecting Plants, Protecting Life' because plants impacts our lives every day. The focus is on preventing the spread of pests and diseases because they have the greatest impact on our crops, our environment and our way of life.

Although isolation measures and restrictions due to the COVID-19 pandemic have meant that many of the planned International Year of Plant Health activities will not go ahead as planned, there are still ways you can get involved.

Plants are under constant attack from invasive pests and diseases. These can severely damage crops, including nursery stock, and forests causing billions of dollars of losses in crops around the world.

Whether you are a production nursery, a retail nursery, landscape practitioner or allied business, you have an important role to play during International Year of Plant Health. By prioritising plant health, you can help to increase food security, reduce poverty, protect the environment, and boost economic development in Australia and across the world.



Hon David Littleproud, Federal Minister for Agriculture, launching International Year of Plant Health in Canberra.



This communication has been funded by Hort Innovation using the nursery research and development levy and contributions from the Australian Government.



How the Greenlife industry is committing to plant health

Although COVID-19 has changed the way that International Year of Plant Health has been acknowledged and delivered, it has not changed the nursery industry's unwavering commitment to plant biosecurity and plant protection.

Through levy-funded investment in projects like the *National Nursery Industry Biosecurity Program* (NY15004) and *Building the resilience* of on-farm biosecurity capacity of the Australian production nursery industry (NY15002), the nursery industry lives the values of plant protection every day.

John McDonald, national biosecurity manager for Greenlife Industry Australia (GIA) has outlined some of the core focuses for the industry as it looks to prioritise plant health on International Year of Plant Health and beyond.

Emergency Plant Pest Response Deed

On behalf of nursery businesses and levy payers, GIA through the national plant protection team is ensuring obligations under the Emergency Plant Pest Response Deed (EPPRD) are met and that all growers are informed and protected from emergency plant pest incursions.

The work being done to communicate the Fall armyworm incursion in 2020 and recent campaigns responding to citrus canker (NT/WA), brown marmorated stink bug (WA/NSW/ VIC/QLD) and tomato potato psyllid (WA) are examples of work conducted under the EPPRD.



Adult female Fall Armyworm. Photo by Robert J. Bauernfeind, Kansas State University, Bugwood.org

Build awareness for Plant Protection and Biosecurity

John and his team will continue to focus on informing growers of the plant protection system developed for industry, through the APPS which includes the BioSecure HACCP – Plant Protection and Biosecurity Manual.

Specifically, the industry is focusing on ensuring that growers understand that the implementation of the procedures in the system is not only managing and improving plant health on a day-to-day basis, but helps to mitigate long-term risks associated with biosecurity incursions for the entire industry and economy.

Plant protection education

Keeping the entirety of the industry informed and aware of best practice biosecurity continues throughout International Year of Plant Health and beyond.

The Nursery Production Farm Management System (*http:// nurseryproductionfms.com.au*) is regularly updated with new resources to keep growers informed of the latest developments in plant health, regardless of whether they are NIASA or BioSecure HACCP certified or not.

There are ongoing partnerships with the federal Department of Agriculture, Water and Environment (DAWE). In fact, a DAWE funded project recently delivered over 530 new pests into the Pest ID Tool (*http://pestid.com.au*).

Work is also ongoing to roll out the Virtual Reality Crop Monitoring Training Module and the digitisation of plant production records for growers to access and complete on their phones or tablets in the field.



Myrtle rust, a common disease to watch out for.

WHAT YOU CAN DO TODAY TO BRING INTERNATIONAL YEAR OF PLANT HEALTH TO YOUR NURSERY

Getting involved with International Year of Plant Health does not require a major change to the way you operate, or a grand gesture or commitment. There are many simple steps that growers can take to make small changes today, to build long term resilience into the future.

Develop a biosecurity plan

Formulate, develop and implement a crop monitoring system and a site surveillance program. Having a plan means a production nursery can be proactive, allowing pest management and plant health to be a key strategic pillar in a business plan, as opposed to unplanned crisis management when things go wrong.

Having a plan should give a production nursery peace of mind that they will be protected as best as possible from either endemic or exotic pests and that any economic impacts are minimised.

Download the BioSecure HACCP Guidelines

A common misconception is that to purchase the BioSecure HACCP Guidelines means committing to the full accreditation process. This is not the case, and **all growers** should have a copy of the guidelines, and be using them as a reference point to ensure they are taking all the steps necessary to develop a biosecurity plan and commit to plant health and plant protection on-farm.

Dispatch and export inspections

The world has never heard the word 'quarantine' as much as it has in 2020, but strict quarantine protocols should also be taking place on every production nursery in Australia.

Ensuring rigorous inspections of plants, people and machinery whenever transportation onto a production or retail nursery takes place, is the first line of defence for preventing plant incursions or disease outbreaks.



Yellow sticky trap.



Blue sticky trap.

Educate your staff

Plant Health is an end-to-end system. Every part of the system works in partnership with the other parts and if one part falls down, so do the rest.

A production manager or business owner can't manage the entire plant health system on their own so it's important that every staff member buys into the plan, understands what to do and comprehends the importance that must be placed on plant health and implementing a rigorous plant protection and biosecurity program.

Ensure that staff are familiar with the business biosecurity plan and documented procedures, even if the production nursery is not accredited and keep them informed and engaged with any new policies and procedures.

MEET MICHELLE PORTELLI, Australian International Year of Plant Health Coordinator

Michelle Portelli is the Australian International Year of Plant Health (IYPH) coordinator. She was appointed by the Plant Biosecurity Research Initiative and is based at Hort Innovation . With a long career in events and engagement, she brings unparalleled experience to connecting people and ideas within the IYPH activities and objectives.

Michelle's role is to work closely with each of Australia's Research and Development Corporations (RDC) to raise awareness of plant health and educate industry as well as the general public.

And according to Michelle, plant health is one of the backbones of Australia.

"Without plant health we wouldn't have plant industries, which contribute significantly to the economy. While human and animal health receive the lion's share of national attention it is sometimes forgotten that a thriving plant industries are absolutely critical to the health of the nation."

So how can growers show their support and dedication to the cause? The answer is simple, get online! "Our biggest resource at the moment is social media, we've turned to social media. We have a Facebook page and a Twitter account as well as our website (links below). Not only will we be using these pages to share up to date information on IYPH and plant health in general, but we will also be showcasing some great Australian success stories."

Growers are encouraged to engage on social media.

"If you see something cool tweet it, or post it on Facebook and tag us," Michelle said.

"We want to start a conversation while we are being watched around the world. IYPH is a real opportunity to highlight some of the great work we do in the nursery industry and showcase just how important our product is to the health of our economy and society."

Petitions have been made to the UN to extend the IYPH because of Covid disruptions. There is global interest in extending International Year of Plant Health to ensure that the events and engagements that were originally planned can still go ahead. But in the meantime, growers can still become champions for plant health.



MICHELLE'S TOP TIPS TO GET INVOLVED IN INTERNATIONAL YEAR OF PLANT HEALTH WITHOUT LEAVING YOUR NURSERY

- DEVELOP an on-farm biosecurity plan to ensure that the product you put out to market is healthy, either by purchasing the guidelines or pursing full accreditation.
- 2. PROMOTE IYPH2020 with a display in your premises. There are a range of resources (see more information below) available to help you do this, including posters, banners, reusable bags and pins.
- SHARE your plant health stories on Twitter and Facebook using these hashtags: #PlantHealth, #IYPH2020 and #Biosecurity
- 4. SHARE any events, research, apps, 'how to' guides or other relevant biosecurity and plant health material with industry professionals and consumers on the IYPH2020 website.

MORE INFORMATION ON INTERNATIONAL YEAR OF PLANT HEALTH

Head to the International Year of Plant Health page on Facebook: https://www.facebook.com/International-Year-of-Plant-Health-2020-Australia-111694910494044/

Sollow us on Twitter: *https://twitter.com/iyph2020*

Learn more about International Year of Plant Health here: https://planthealthyear.org.au/

Find out more about BioSecure HACCP Certification: http://nurseryproductionfms.com.au/

Access the Pest ID Tool: https://www.pestid.com.au/

PAST EDITIONS OF NURSERY PAPERS ARE AVAILABLE ONLINE on the Greenlife Industry Australia website: *https://www.greenlifeindustry.com.au/Section?Action=View&Section_id=46*