# Vigilance leads to strength and innovation in biosecurity

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2020 brought changes no one could have predicted, with the global movement of people slowed to combat the biggest human biosecurity threat in a century. But the movement of goods has continued, and is now more important than ever to ensure robust global economies and food security.

The shipping industry helps connect us to the wider world and keeps Australia's trade alive, so we can remain one of the world's strong economies.

But as mail and cargo volumes increase, so do potential biosecurity risks that could threaten our agricultural industries and rich environmental heritage. Pests and diseases remain just one sea or air voyage from our shores.

As the agency tasked with safeguarding Australia's biosecurity, we prevent and respond to plant and animal pests and diseases that threaten us.

In 2020, we responded to interceptions including the potentially devastating khapra beetle, found in imported whitegoods, avian flu in Victoria, and parcels of unidentified seeds arriving to unsuspecting members of the public.

This decade will see more mail and cargo entering Australia than ever before; and as the world recovers from COVID, the influx of passengers will eventually resume and potentially rise.

That's why we continue to strengthen our biosecurity system to protect our $61 billion agricultural industry and over $6 trillion in environmental assets.

### Innovation key to a strong, smart biosecurity system

Innovation is vital to stay ahead of ever-changing biosecurity challenges. Our Biosecurity Innovation Program seeks to evolve how we manage risks, so our biosecurity system works smarter into the future.

Through the program, currently in its third year, we are investing in new technologies and approaches to biosecurity risk management. For example, in collaboration with Iugotec Pty Ltd, we are developing portable technology to detect brown marmorated stink bugs in containers without conducting manual searches.

Our partnership with the Centre for Invasive Species Solutions and the University of Canberra's EcoDNA Laboratory is exploring genetic methods for pest detection, with researchers now able to find DNA traces of pests like khapra beetle, in dust and dirt on packaging.

Other pest detection technologies for shipping containers are being developed by Trellis Data Pty Ltd and Industry Spec Drones Pty Ltd, through proof of concept funding in the form of Business Research and Innovation Initiative grants.

These cutting-edge technologies are part of a strong defence against invasive pests. But we also need the shipping industry to remain vigilant.

We encourage industry to practice good container hygiene and report pests to our See. Secure. Report. hotline — 1800 798 636 — or online at agriculture.gov.au/report.

### Better marine risk management

In 2020 we also made progress in technology and activities to better manage biosecurity risks from ballast water and biofouling.

Advances in the use of molecular technology in port surveillance bolstered our understanding of the risks related to ballast water, and allowed us to increase the availability of risk-based exemptions for major cargo routes in Australia. In collaboration with Centre for Excellence in Biosecurity Risk Analysis, we spearheaded projects to investigate machine learning technology that can rapidly assess biofouling risk on submerged vessel surfaces.

We are also continuing to trial modified Remotely Operated underwater Vehicles (ROVs) with live-streaming high-quality video, sonar navigation and custom mountable wheels, so ROVs can 'drive' along the underside of a vessel hull.

We have been resolving issues related to in-water cleaning policy and will consult with industry on a new strategy in 2021. We have also maintained active involvement in the review of the International Maritime Organization's Biofouling Guidelines and are designing stronger regulation of biofouling risks.

### A strong partnership with industry

We understand that working with the shipping industry to manage biosecurity risks is give and take, and we are looking for ways to reduce red tape to make the movement of goods easier for everyone.

The 2020 Budget committed to busting congestion for agricultural exporters. We will provide a modern digital export system in the form of a single online portal. This will reduce documentation and processing times and make dealing with government faster and more cost-effective for exporters.

The online portal is just one of several Budget measures that will help products get to export markets faster, and a step towards a better regulatory system for all cross-border trade.

We envision a future state of biosecurity where industry and community feel ownership and responsibility for protecting our country from pests and diseases. We are committed to continuing to work with you to manage biosecurity risks, so we can all contribute to keeping Australia's agriculture and environment safe.

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