Plant Biosecurity in Australia – An introduction for growers

Dr Zac Hemmings, Regional Plant Biosecurity Officer, NSW Department of Primary Industries

What is Biosecurity?

Biosecurity refers to a set of practices that reduce the negative impacts of pests and diseases. Biosecurity can be practiced by anyone at any time. There is no requirement that biosecurity be undertaken as part of a structured program, or that multiple parties be involved.

A grower using netting to reduce damage from insect pests is very different to a government regulating and enforcing biosecurity laws, but fundamentally they are both biosecurity practices.

The concept of biosecurity also applies to any pest, whether that be established or exotic. However, typically when you read about biosecurity it's in relation to an exotic pest that is not present in Australia or is under official control in part of the country.

Australia's Biosecurity System

Australia's unique geography and position in the world provides some protection from the natural spread of many pests. As a result, Australia is free from many major pests and diseases that are present elsewhere. This pest-free status provides several benefits, including reduced cost of agricultural production, increased agricultural productivity, and access to international markets.

A pests' impact is not limited to economic damage; they can also have a negative effect on society, people's health, and the environment. Many plant pests are capable of feeding and reproducing on a wide range of plant hosts and were they to establish they could threaten our wider natural environment. Despite our geographical advantage, the ever-growing volume of global travel and trade means increasing pressure on our system to keep pests out or detect them early enough to support their eradication.

The overarching goal of Australia's biosecurity system is to apply the concept of biosecurity at the national level by

> **"minimis[ing] adverse impacts of pests and diseases on Australia's economy, environment, and the community while facilitating trade and the movement of plant, animal, people and products.**

First and foremost, the system aims to reduce the risk of pests entering the country. Failing this, the system aims to eradicate the pest before it can become established.

As a pest population grows and spreads it becomes increasingly difficult to eradicate. Successful eradication therefore relies on early detection, either through structured surveillance programs led by government and industry, or by reporting of suspect pests by the general community.

If there is no method to feasibly eradicate the pest, or the cost of eradication is greater than the benefit of eradication, then the pest may be able to be contained to a specific area and its impact minimised.

The final and least desirable option is long term management where the management of the pest is primarily the responsibility of the land manager, with government and industry providing technical support.

Participants

The Australian biosecurity system is not comprised of a single entity, but is a partnership between government, industry, and private entities. The roles and responsibilities of the federal, state and territory governments are formalised in the **Intergovernmental Agreement on Biosecurity (IGAB)**. The system is built on the foundation of shared responsibility by all, government, industry and the general public. This is not to say that all parties have the same role and equal responsibilities. The concept of shared responsibility means that participants in the biosecurity system should be responsible for matters under their control.

The Commonwealth government is responsible for biosecurity at the national level. This includes pre-border and border screening of biosecurity material, development and enforcement of quarantine rules, risk assessments of imported goods, and providing national leadership. They manage international government-to-government agreements and report the status of pests and diseases in Australia to meet international obligations and requests from trading partners.

State and territory governments are responsible for biosecurity within their borders. This includes regulation and compliance, surveillance, and diagnostics to support early detection of pests. It also covers claims of pest freedom to assist the Commonwealth in meeting its reporting obligations and responding to exotic pest reports and detections within their borders including eradication and containment.

Plant Health Australia (PHA) is a government-industry co-funded not-for-profit company which acts as the coordinator of the government-industry partnership for plant biosecurity in Australia. Membership to PHA includes industry bodies, state and federal governments, and associate members. PHA collaborates with industry on the development of industry biosecurity plans.

Industry groups and representative bodies are responsible for biosecurity awareness and preparedness for their respective industries, advocating for the biosecurity interests of their members, and contributing to surveillance through industry led programs (e.g. CitrusWatch). An important aspect of this is the development of industry biosecurity plans. These plans identify exotic pests and assess the risk present and describe farm biosecurity measures to address these risks.

Under the concept of shared responsibility, individuals including growers and the general public, are responsible for complying with biosecurity obligations, including relevant state or territory regulations.

Specific legislation varies, but typically includes an obligation to report suspected exotic plant pests. These laws often acknowledge that not everyone can be expected to recognise an exotic plant pest on sight, and liability is typically commensurate with expected knowledge. For example, a producer that exports fruit to international markets is expected to have greater knowledge of pests relevant to their industry than a member of the general public.

This article gave a broad overview of biosecurity in Australia, setting the scene for further articles exploring Australia's biosecurity system. If you're interested in learning more about biosecurity, how it works, and what you can do to improve biosecurity on your property, then stay posted! If you just can't wait, head on over to the Plant Health Australia website and check out their short Biosecurity Online Training (BOLT) modules.

NSW GOVERNMENT | Department of Primary Industries

IF YOU SEE ANYTHING UNUSUAL, CALL THE EXOTIC PLANT PEST HOTLINE

1800 084 881