



Biosecurity

“Biosecurity” is a general description for a series of measures designed to protect individual farming properties, businesses and the nation as a whole, from the entry and spread of exotic pests. This is done by using exclusion, eradication and control measures.

As an island continent, Australia has remained relatively safe from the serious plant pests including insects, diseases and weeds, which are found elsewhere in the world. This benefits plant industries, including the vegetable industry, by giving growers a valuable competitive advantage in terms of securing market access and maintaining reduced production costs.



Protecting Australia's crops is important to ensure the long-term survival of the industry.

Effective pest management is essential in protecting Australia's economy. Exotic pests could cost the industry millions of dollars through job losses, reduced export opportunities and increased control costs. The gross value of vegetable crops is around \$2.3bn¹ and exports (mainly to Asian countries) are worth, on average, \$200m annually². Direct employment in the industry stands at approximately 15,000 jobs³.

The current level of strict quarantine is an essential part of protecting Australia's vegetable industry from new pests. However, these measures will not provide total protection. For example, the currant-lettuce aphid, recently discovered in Tasmania, appears to have entered Australia from New Zealand after unusual weather conditions.

The potential for natural incursions from near neighbours and increasing international movement of passengers, cargo and mail is an ongoing threat to Australia's favourable plant health status.

Plant Health Australia (PHA) is working with AUSVEG, Horticulture Australia, representatives from the federal, state and territory governments and other experts to develop national biosecurity plans for the vegetable and potato industries.



A sign promoting hygiene as a biosecurity measure.

The bottom line

- Industry, government and the community are all responsible for maintaining Australia's plant health status
- Prevention is the key
- Growers can use simple biosecurity measures to protect the industry; keeping crops pest free and preventing movement of pests between regions

The development of the vegetable industry biosecurity plan will include:

- identification of high-risk pests
- development of risk management measures
- contingency plans to ensure any exotic pest outbreaks are efficiently managed

Practices that minimise the risk of exotic pests are key aspects of any biosecurity plan. This is not only important for the profitability and sustainability of individual businesses, but for the whole vegetable industry.

Potential pests

There are a number of pests that affect vegetable crops around much of the world that are currently not present in Australia. For example, the American Serpentine Leafminer (*Liriomyza trifolii*) could have a significant impact on the Australian vegetable industry. It attacks plants by burrowing into the leaves of a range of vegetable crops including cucurbits, alliums, brassicas, capsicums, celery, lettuce, potatoes and tomatoes. The vegetable biosecurity group is currently working to identify other high priority exotic pests that could cause significant impact in Australia.



Liriomyza trifolii.
photo: Mike Parrella

Biosecurity strategies

There are several practical steps growers can take to ensure better biosecurity for their individual business, and the wider industry, including:

- regularly inspect crops and report suspicious insects, diseases and weeds to the nearest agriculture department as soon as they are detected (Exotic Plant Pest Hotline freecall - 1800 084 881)
- learn about local and common pests so that any new pests can be identified
- clean dirt and plant material from any footwear, equipment or vehicles entering your property (this includes your own footwear, vehicles or machinery if taken off-farm)



Washing down bins.

- put systems in place to deal with contractors and visitors to minimise the introduction of new pests to your property. This can be done by restricting the movement of people and machinery on your property
- use signage to inform visitors to your property of biosecurity and hygiene measures in place
- buy accredited seed or planting stock where possible
- identify any areas on the property that are infested with weeds, insects or diseases so they can be managed and precautions can be taken to prevent further spread

Further information:

More information on the vegetable industry biosecurity plan, it is available on the PHA website:

www.planthealthaustralia.com.au/vegetables

Acknowledgements

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References

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- ² ABS (2003) 7503.0 Value of Agricultural Commodities Produced, Australia. Australian Bureau of Statistics, Canberra ACT.
- ³ AUSVEG (2004) AUSVEG home page (online). Available from www.ausveg.com.au Accessed 23 June 2004.

ISSN: 1449 - 1397

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VEGEnotes is coordinated, edited & printed by:
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