

A risky business - Teacher

Background information

Australia is relatively free from many of the plant pests and diseases that seriously impact on agriculture and horticulture in other countries. Through the absence of these pests and diseases, Australia's plant industries have a valuable competitive advantage in terms of securing market access and maintaining lower production costs.

If exotic plant pests or diseases found their way into Australia, the economic viability of Australia's plant industries would be directly threatened. Even the perception of pests in Australian produce would have a rapid and negative impact on our reputation as a producer of safe, quality food products.

There are millions of potential pest threats to Australian plant industries. With a huge increase in international trade and travel, large borders and limited resources, it would be impossible to try to stop all of these potential pests from entering the country. Instead, we prioritise and target the highest risk pests.

Relevance to plant biosecurity

International trade regulations demand that prioritisation and targeting of biosecurity risks be conducted scientifically. So, how do we know which pests or diseases are the biggest potential threats to Australia's plant industry?

The potential risk of a pest is defined by:

$$\text{Risk} = \text{likelihood} \times \text{consequence}$$

(where likelihood encompasses the potential for the pest to enter the country, establish and spread and consequence refers to the economic, environmental or social impacts the pest might have).

Once a pest has been identified as high risk, plans can be developed and put in place to prepare for, and prevent, incursions.

Activities for students

- Complete the risk analysis task, 'A risky business'. This task requires students to work in small groups (or individually) to research a pest and assess its risk using the guidelines provided. Students will need internet access to complete this task.
- Watch the Khapra beetle news story to see how easily a pest can enter the country. Read the Khapra beetle fact sheet to find out more about this pest and discuss the impacts that an untreated incursion could have on the Australian wheat industry.

More information

<http://www.crcplantbiosecurity.com.au/program/preparedness-and-prevention>

http://www.agric.wa.gov.au/PC_92918.html?s=1001

http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/26_6460_ENA_HTML.htm

