



Australian Government

Department of Agriculture,
Fisheries and Forestry

Hitchhiker pest awareness

September 2024

Joel Freeman, Director

Hitchhiker Pest Working Group,
Biosecurity Plant and Science Services Division



Agenda

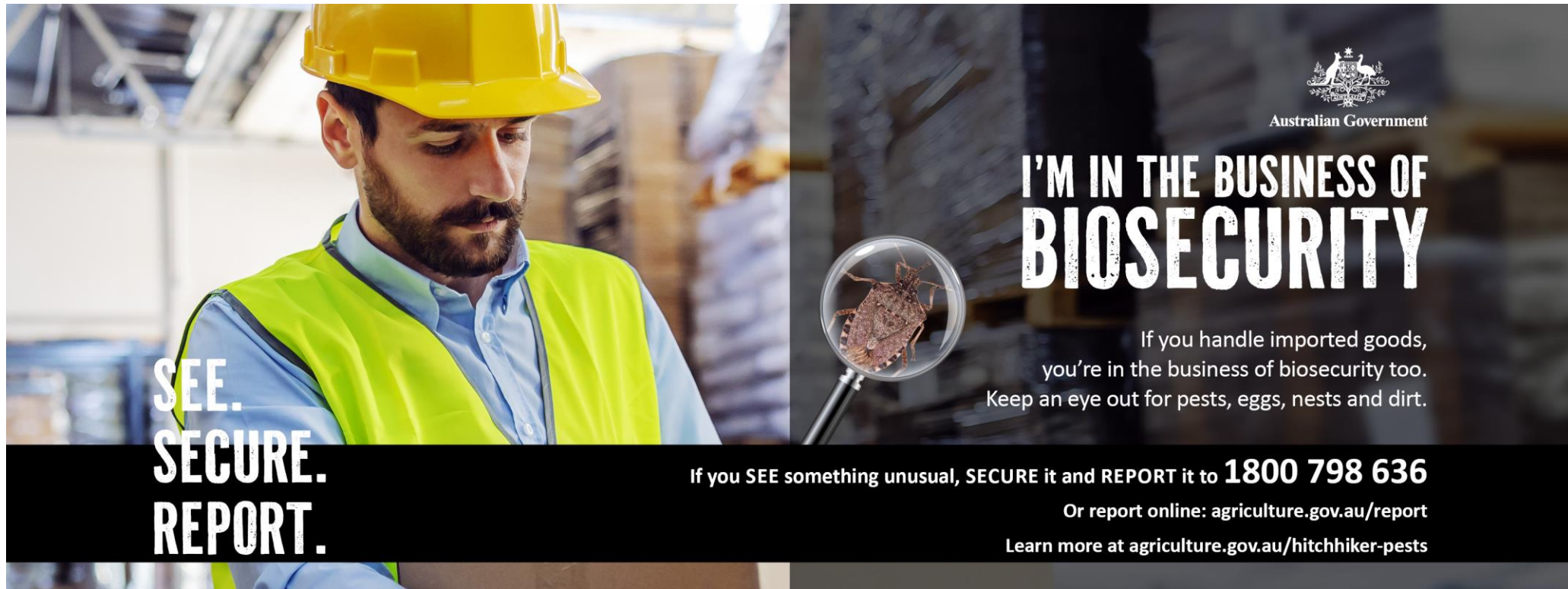
1. Australian biosecurity
2. Hitchhiker pest overview and risks
3. Hitchhiker pest program
4. Hitchhiker pest awareness campaign
5. Case study: khapra beetle in fridges and highchairs
6. Spotting and reporting hitchhiker pests
7. Q&A



Australian biosecurity

Biosecurity is the management of the risk of pests and diseases entering, establishing or spreading in Australia.

Our biosecurity system is extensive and complex. It protects our economy, environment and way of life. And it includes you!



**SEE.
SECURE.
REPORT.**

**I'M IN THE BUSINESS OF
BIOSECURITY**

Australian Government

If you handle imported goods,
you're in the business of biosecurity too.
Keep an eye out for pests, eggs, nests and dirt.

If you SEE something unusual, SECURE it and REPORT it to **1800 798 636**
Or report online: agriculture.gov.au/report
Learn more at agriculture.gov.au/hitchhiker-pests



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Hitchhiker pest overview and risks

Dr Brian Garms, Director

Plant Sciences and Risk Assessment,
Biosecurity Plant and Science Services Division



Hitchhiker pest overview

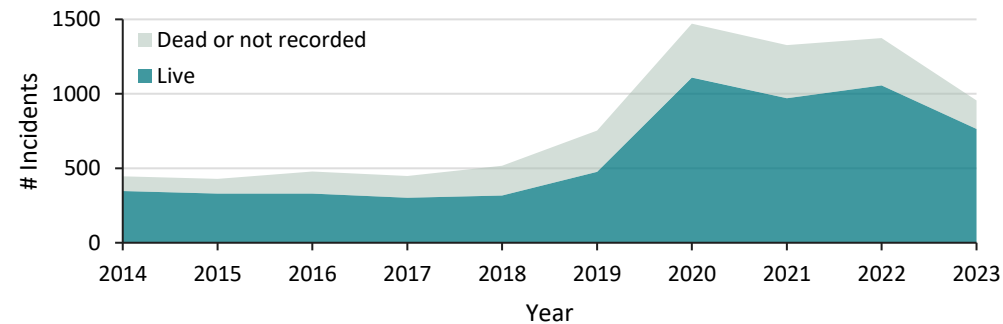
Hitchhiker pests are pests that can 'hitch a ride' to Australia within or on shipping containers, imported goods and other forms of transportation. Hitchhiker pests are not native to Australia.

Several countries, including Australia, have seen an increase in the global movement of sea containers infested with hitchhiker pests.

This increase can be attributed to:

- climate change
- intensification of agriculture
- accelerated movement of people and products
- changes in trade patterns.

Increasing threat of hitchhiker pests (including arthropod pests, plant pathogens and seeds) on external surfaces of sea containers arriving in Australia from 2016-2022.



Sourced from the department.



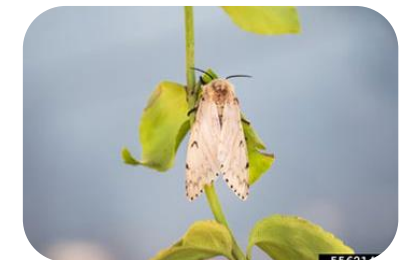
Khapra beetle



Giant African snail



Exotic invasive ants



Spongy Moth

Changing trade patterns





Biological traits of successful hitchhiker pests

1. **Ability to enter on cargo, sea containers and/or conveyances**
 - Attracted to inanimate cargo, conveyance areas (ports), overwintering sites, industrial lights, lays eggs on substrates, areas of refuge
2. **Ability to reach the destination country**
 - Survive transport conditions (temperature, humidity)
 - Survive periods without food and/or water
 - Overwinters/aestivates/hibernates/functional diapause etc.
 - Scavengers
3. **Ability to distribute and establish**
 - Ability to spread to hosts on arrival
 - Forms aggregations/nests



How many hitchhikers are there?

Overwintering	Egg laying	Nesting	Sheltering	Internal
<ul style="list-style-type: none"> • BMSB • Yellow spotted stink bug • Western conifer seed bug • Mottled shield bug • Harlequin ladybeetle • Seven spotted ladybeetle • Asian giant hornet 	<ul style="list-style-type: none"> • Spongy moth • Nun moth • Hylesia nigricans • Spotted lantern fly • Joro spider 	<ul style="list-style-type: none"> • Asian honey bee • Giant honey bee • Dwarf honey bee • Red imported fire ant • Little fire ant • Browsing ant • Asian needle ant 	<ul style="list-style-type: none"> • Giant African snail • Korean round snail • Golden apple snail • Chocolate banded snail • White-lip garden snail 	<ul style="list-style-type: none"> • Khapra beetle • Trogoderma spp.
				

Impacts of hitchhiker pests

Hitchhiker pests have the potential to **inflict significant damage to our agricultural sector, environment and way of life**. An incursion could cost Australia:



\$19.4
billion

over 20 years
for khapra
beetle



\$10.6
billion

over 20 years
for invasive ants



\$2.1
billion

over 20 years
for Flighted
Spongy Moth
Complex



\$1.9
billion

over 20 years
for giant African
snail

Figures are presented in 2022-23-dollar equivalents of the figures reported in Hafi & Addai's report 'Economic consequences for species representing different pest groups affecting portfolio industries' (2014).



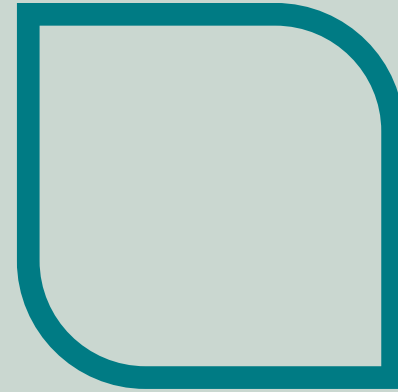
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Hitchhiker pest program

Joel Freeman, Director

Hitchhiker Pest Program,
Biosecurity Plant and Science Services Division



Hitchhiker Pest Program



Aim: The Hitchhiker Pest Program aims to build a stronger biosecurity system to protect Australia from hitchhiker pests in sea containers and their cargoes.



Approach: We are adopting a systematic approach to manage risk along the container pathway through...



Expanded use of
offshore controls



Targeted onshore risk
intervention and
surveillance



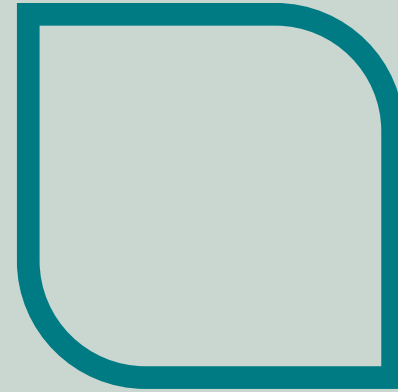
Partnerships with
industry, government
and researchers



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Hitchhiker pest awareness campaign



Monica Talbot, Assistant Director

Stakeholder Engagement,
Biosecurity Plant and Science Services Division



Hitchhiker pest awareness campaign

Sponsored advertising

Ads on social media and websites; sponsorship of Ports Australia conference



Merchandise products

Caps, coffee cups, pens, air fresheners, posters



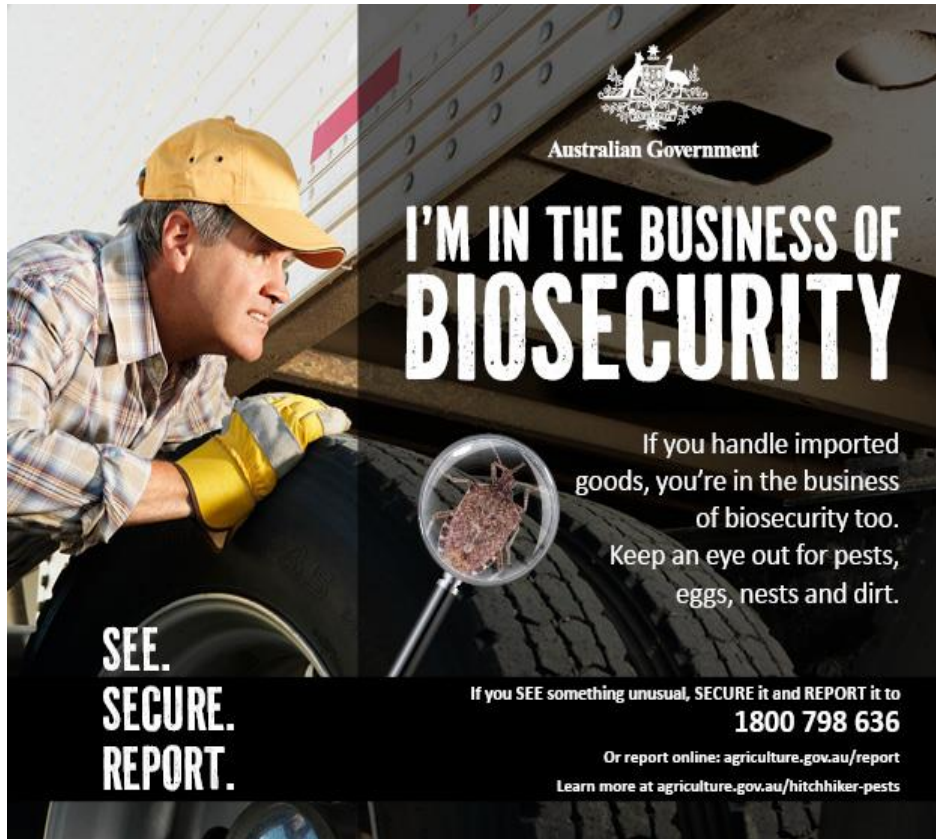
Other activities

Digi-kits, email, free articles, DAFF social media, webinars



Social media and webpage ads

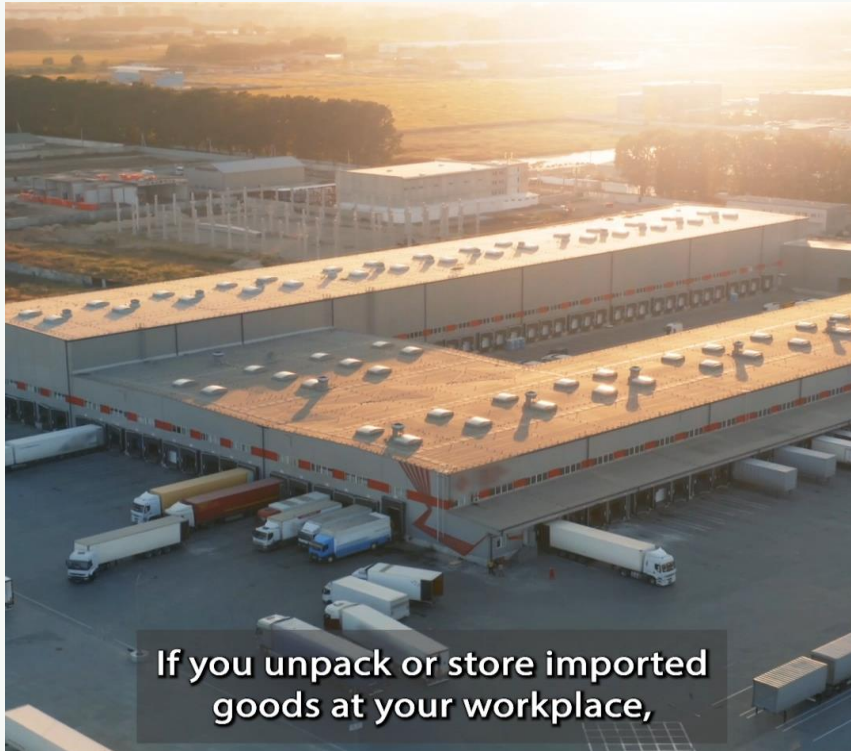
Follow us: **@daffgov** on Facebook and Instagram, and Department of Agriculture, Fisheries and Forestry on LinkedIn



Videos



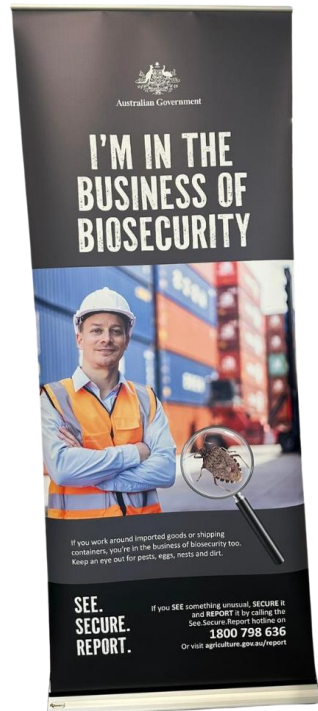
Warehouse: [Warehouse video link](#)



Seaport : [Seaport video link](#)



Merchandise examples



Banners & posters



Digital information toolkits

Digital information kits are available to download from our website. The kits include:

- Social media tiles
- Posters and factsheets
- Newsletter article
- Email signature blocks
- MS Teams backgrounds.

We encourage you to use and share these resources to help spread awareness.

Visit agriculture.gov.au/hitchhiker-pests to download!



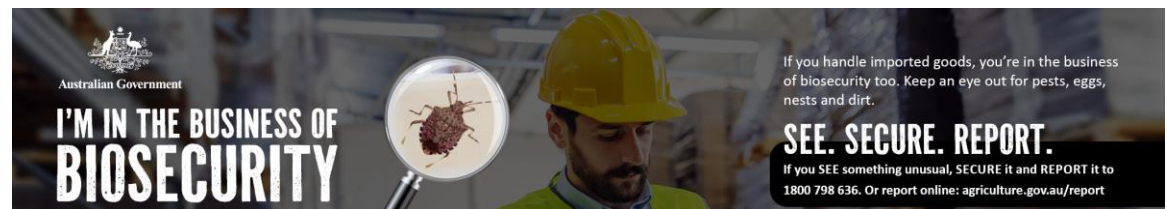
MS Teams backgrounds



Social media tiles



Email signature blocks:



Factsheets





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Case study: khapra beetle in fridges and highchairs

Gunter Ebert, Director

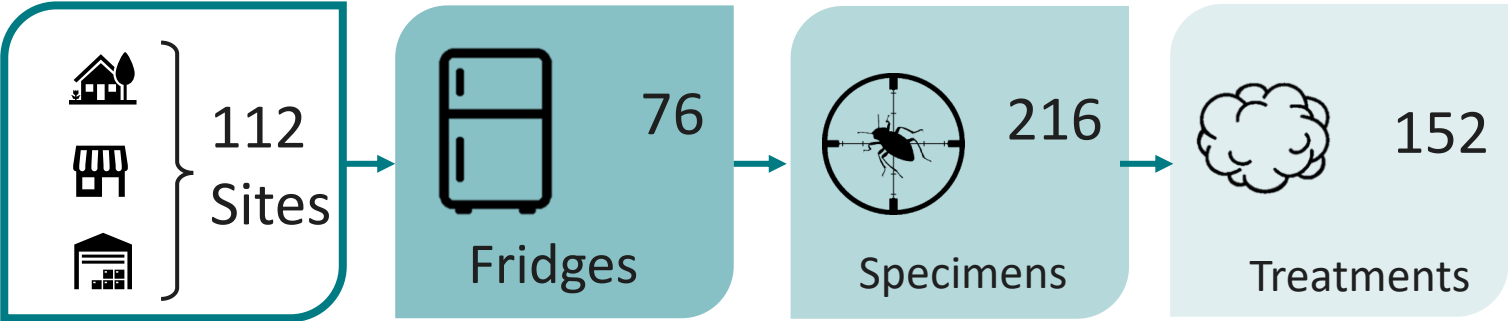
Biosecurity Reports and Response,
Biosecurity Operations Division



Case study



- A member of the public submitted a report to DAFF of insects in the packaging of their fridge.
- Samples were taken.
- Traceback identified the fridge came from an import of 15 container loads of whitegoods from Thailand.



Resources



4890 Hours



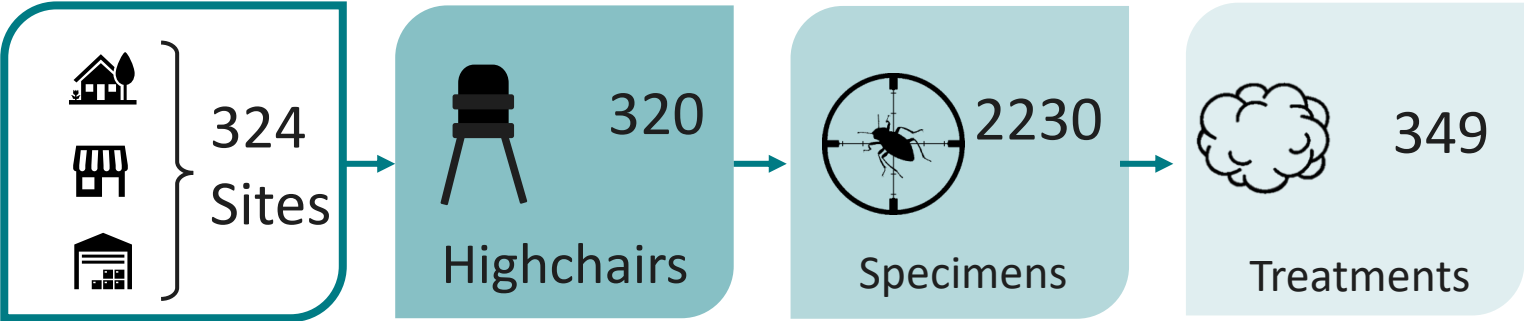
Around \$250,000



Case study



- A member of the public submitted a report to DAFF of insects in the packaging of their highchair.
- Samples were taken.
- Traceback identified the highchair came from an import of highchairs from Italy.



Resources



17,930 Hours



Around \$896,500





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Spotting and reporting hitchhiker pests

James Pickering, A/g Operations Manager

Cargo Inspections Management,
Biosecurity Operations Division



Where to look

How can you tell if it's a hitchhiker pest?

It's all about where you find it and if it's unusual to see it there.

Focus on items that have recently arrived in Australia from overseas, including:

- Shipping containers
- Timber pallets
- Cardboard boxes and other packaging used to carry imported goods
- Recently imported break bulk cargo and large machinery such as tractors
- Warehouses or retail stores containing imported goods
- Homes containing recently purchased goods.



Where to look

Shipping containers

- Shipping containers can easily become contaminated.
- This container was heavily covered with grain contamination on all six sides.
- Look inside tyne slots and twist-lock pockets.
- Look alongside rails.
- Look along the side walls, contamination does not always require a ledge to sit on.
- The roof can become contaminated from containers stored above.
- Heavy plant contamination such as this can support a variety of pests and may not be the only risk factor.



Where to look



Rice contamination on container floor.



Rice contamination in floor crevice at door.



Wheat contamination in floor crevice alongside of container.



Soy beans in far corner of container.



Heavy barley contamination at door of container.



Soil and plant material on flat rack container.

What to look for



Frass visible on floor once timber pallets removed. A clear indicator of active borers.



Distinct oval shaped hole indicative of longicorn beetle activity.



Borer holes with frass in timber packaging.



BMSB on floor near imported goods.



Visible contamination on packaging surfaces.



Termite tunnelling underneath shipping container.

What to look for



Soil contamination on external container surface



Beehive on container underside



Giant African snail on external surface



Khapra beetle larvae in screw hole of container floor



Yellow Spotted Stink Bug on packaging of imported goods



Khapra beetle and larvae in rice

What to look for



Frass



Frass is easily spotted even when the borer holes are small.



Evidence of insect activity



Dead insects and skins indicate multiple life stages were present.

What to look for



As a predator species, live spiders can indicate that other live insects are present.



Snails on the inner wheel of a new car.



Dead vermin within motor of refrigerated container.



Reptiles hide easily in containers and on goods.

How to Secure



Shut container doors and display a sign.



Plastic bags can be used to secure contamination.



Plastic wrap items for short term containment.



Keep small containers with secure lids at unpack locations. Jars and bottles work too.



Label the bag or container with consignment information and the collector's name.



Cardboard boxes can be used to secure live animals such as mammals or birds.

How to Secure

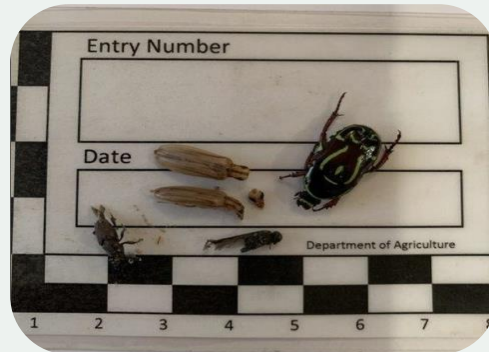


1. Insecticide



- Use an insecticide or knockdown spray to prevent live insects from escaping.
- Insecticide can also be used to create a barrier for crawling insects.
- Spray flying insects.
- **DO NOT** spray honey-bee swarms or if it will cause the insects to disperse.

2. Photos



- Take plenty of photos.

3. Scale



- Include a ruler or pen to provide scale.

4. Label



- Label with consignment linking information such as the container number.
- Include the name of the person who collected it.

How to report detections

Seen something unusual? Secure and report it, even if you're not sure.

1. **Secure** the pest
 - Shut the container door or secure the goods, and
 - Capture a photo if possible.
2. **Report** the pest to our See.Secure.Report Hotline:
 - 1800 798 636
 - agriculture.gov.au/report
3. Our officers investigate all reports related to imported items and will guide you through the next steps.

SEE. SECURE. REPORT.

1800 798 636

agriculture.gov.au/report



Online form

Use this form to report unusual material in imported cargo, containers or parcels. Give as much detail as you can.

* represents mandatory field

* Required information

Salutation

Ms

First name *

Last name *

Email address

Phone number *

State or Territory *

ACT

Biosecurity concern

(Please provide details of your biosecurity concern, including type of item, when purchased or imported and from where, and what the biosecurity concern is; for example bugs in rice)

Questions?

Learn more:

Look for hitchhiker pests

agriculture.gov.au/hitchhiker-pests



Hitchhiker Pest Program

agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/hitchhiker-pests



See.Secure.Report hotline

1800 798 636 or agriculture.gov.au/report



You can also contact us at

PlantStakeholders@aff.gov.au

Thank you

