



**Australian Government**  
**Department of Agriculture**

# Cargo pests guide



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# Look for pests on imported cargo

This guide provides information on some of the most common pests found on cargo, but there are many more. Pests arriving from overseas can be a serious threat to our way of life here in Australia. Pests and diseases can wipe out entire food and fibre crops, affect our health, our pets and livestock, and damage our unique environment.

Some pests can even change the simple things in life that we take for granted. Take red imported fire ants for example. These ants will attack when disturbed and have a very nasty sting – as their name suggests. There are stories available online that describe how people in the United States cannot hang their clothes out to dry, or host a BBQ in their backyard because of fire ant infestations.



Fire ant stings

It is critical that pests are detected where they are likely to first appear – at our ports. This means you are on Australia's frontline against pest and disease incursions.

The *Biosecurity Act 2015* requires persons in charge of goods that are subject to biosecurity control to notify the department of reportable biosecurity incidents such as live pests.

We don't expect you to be a bug expert but sometimes a biosecurity risk is not hard to spot.

### **What to look for**

- Live or dead animals, including insects.
- Egg masses on any surface (which can resemble pale furry lumps).
- Holes in timber or frass which is the powdery substance expelled from the timber when there is borer activity.
- Mosquito activity around pooled water.
- Plant matter, soil or mud – often combined and attached to a surface (e.g. on machinery).

### **Where to look**

- Inside and on the outside surface of shipping containers.
- Attached to machinery and vehicles (break bulk cargo).
- In timber (e.g. pallets).
- In packaging including plastic wrapping and cardboard boxes.
- Food stuffs.
- On vessels.

## Responding to cargo pests

If you see any unexpected pests, plant matter or soil, report them immediately to the Department of Agriculture.

This takes one simple phone call to our **See. Secure. Report.** hotline on **1800 798 636.**

We'll give you advice on the best way to contain the problem, and prevent other cargo from being contaminated.

Some of the steps you might be asked to take include:

- Closing container or vessel doors or creating barriers.
- Isolating the affected cargo in an area away from other goods.
- Using tarpaulins or blankets to cover the area or restrict animal movement.
- Taking photos, recording the location and collecting a specimen if safe to do so. This will help us to identify the pest and determine the best treatment.
- Using knockdown spray as a last resort to prevent insects escaping, but don't use a knockdown spray if you think it will cause the insects to disperse.



## Asian gypsy moth

The Asian gypsy moth is a major threat to Australia's horticulture and forestry industries, native forests and urban plants.

Adult moths are pale with black marks and have a wingspan of between 3 cm and 7 cm. Larvae are covered by tufts of long hair, and can be dispersed on the wind.

Egg masses are laid on surfaces near lights when vessels dock at temperate Asian ports (China, Taiwan, Japan, Korea and Russia) between May and October.

These masses contain up to 1,200 eggs that are covered in yellow scales, and can remain viable for months.



## Burnt pine longicorn beetle

Burnt pine longicorn beetles lay their eggs into pine and spruce trees where their larvae bore into the timber.

This species is found in Europe, North Africa and New Zealand, and can fly aboard or can be brought in with cargo.

Burnt pine longicorn beetles shelter in crevices during daylight hours. They are active and attracted to lights on summer nights, generally between November and March.

Adults can be between 1 cm and 3 cm in length, are dark brown and have long antennae.



Adult and larva with rice grains



Adult

## Khapra beetle

Khapra beetles feed on dried plant and animal products with a preference for grain and stored products. This is a risk to Australia's grain industries and could jeopardise our export grain markets.

Larvae can survive being dormant for two or more years in varied conditions.

Adult beetles are reddish-brown, oval in shape and are about 2 to 3 mm long.

Larvae are typically very hairy (with distinctive tufts over the body and a short tail), are pale yellow to golden-brown, and range in size up to 5 mm long.

They go through several moulting stages, leaving behind numerous cast skins which can indicate their presence.

Asiatic honeybee



Dwarf honeybee



Giant honeybee



Cape honeybee



Wax comb



## Exotic honey bees

Exotic honey bees may be aggressive, and the parasites, such as varroa mite, and diseases they carry pose a significant threat to Australia's honey and agricultural industries.

Bees are usually between 1 cm and 2 cm in length, and are hairy and often patterned with black and yellow/orange markings.

Wax combs or insects flying to and from a nest can indicate the presence of bees. Nests may be found underneath a structure or in hollow spaces.

If a colony or swarm of bees is discovered on board, do not disturb them. Bees require specialist treatment.



Adult



Wrigglers in water



Breeding site

## Mosquitoes and mosquito wrigglers

Mosquito larvae (wrigglers) are the life stage most likely to be found onboard vessels.

They live in pools of fresh or brackish water and they are very active (wiggle) when approached or disturbed.

Adults, which are slow fliers, often hide in dark, protected areas and lay their eggs (which look like black specks of pepper) where water pools.

Eggs can remain viable for up to a year.



©Melinda Fawver



©Baldo Villegas

## Brown marmorated stink bug

Brown marmorated stink bugs are an Asian agricultural pest that has recently invaded Europe and the USA.

They are highly invasive and feed on about 300 known host plants including many fruits and vegetables.

They seek shelter from cold weather, and can aggregate in or on shipping containers, motor vehicles, machinery, boats and other items which may be loaded onto vessels.

Adult bugs are up to 1.7 cm in length, and have a shield-shaped body which is mottled brown, with black and white banding around the rear margin.



## Multicoloured Asian lady beetle

The multicoloured Asian lady beetle is another invasive insect which is rapidly spreading across overseas countries.

When seeking shelter from the cold, they can congregate on shipping containers and various other cargo items which may be loaded onto vessels.

These beetles are fairly circular and dome-shaped, and between 5 mm and 8 mm long. The colour may be yellow, orange, red or black, and they can have many, some or no spots.



Yellow crazy ants. Phil Lester, Victoria University of Wellington, New Zealand



African big-headed ants. Bob Taylor, CSIRO

## Exotic ants

Exotic ants may be aggressive and invasive. If they establish in Australia they could cause social, ecological and economic damage.

Being social insects they are often found in groups or associated with a nest.

Ants can range in size from 1 mm to 30 mm in length.

Each colony may contain ants with a variety of sizes, colours and forms, including winged individuals.

Fertilised queen ants which may have wings pose a high biosecurity risk, as they could start a new colony.



Adult giant African snail



Snail eggs and juveniles

## Exotic snails and slugs

Exotic snails and slugs can cause severe damage to Australian agricultural systems and natural areas, and can spread diseases which affect humans, animals and plants.

They are able to spread as eggs, juveniles or adults, and these can be attached to vessel structures, cargo, shipping containers, machinery or motor vehicles.

The giant African snail (often referred to by biosecurity officers as GAS) can have a shell length of up to 20 cm, and eggs which are about 5 mm wide.



Borer holes and frass



Aphids on citrus

## Other plant pests and borers

Plant pests can be found on any part of a plant, including roots, stems, leaves, flowers and seeds.

Some insects and mites on plants can be microscopic or hidden beneath a wax covering. Their presence may be indicated by leaves with webbing, marks or unusual growth.

Borers can live inside timber, stems or seeds, often leaving signs such as holes or frass (like sawdust).

# SEE. SECURE. REPORT.

1800 798 636



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