

Exotic Pest Alert: Burnt pine longhorn beetle

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Plant Biosecurity & Product Integrity, Orange

Burnt pine longhorn beetle (*Arhopalus fesus*) is an exotic plant pest **not present in Australia**

This insect pest is a serious threat to Australia's **forest products industry**

If found it must be reported promptly to the Exotic Plant Pest Hotline **1800 084 881**

Burnt pine longhorn beetle

Burnt pine longhorn beetle, also known as burnt pine longicorn, is a pest of plantation trees, particularly pine (*Pinus* spp.).

Adult burnt pine longhorn beetles (Figure 1) are attracted to bright lights and seek shelter in dark secluded areas during daylight. This behaviour often leads to them becoming hitchhikers on imported cargo or vessels.

The flight season of burnt pine longhorn beetle extends from November to April/May. During this period, adult beetles are often intercepted at the Australian border on ships from New Zealand.

Damage

Larvae of burnt pine longhorn beetle feed under the bark of infested trees, boring trails in the timber up to 10 cm deep. Larval tunnels usually run parallel with the timber grain and contain compacted red-brown frass (Figure 2).

Adult burnt pine longhorn beetles vector fungi that cause discolouration of the internal timber. Discolouration, known as sapstain (Figure 3), impacts the quality and marketability of timber.

Burnt pine longhorn beetles are primarily found in burnt or dead trees and become a major pest after fire.

Burnt trees can be attacked within 24 hours of a fire and so the time available to salvage burnt trees is greatly reduced.



Figure 1 Adult burnt pine longhorn beetle (12–30 mm)



Figure 2 Burnt pine longhorn beetle larva (about 25 mm) surrounded by red brown frass



Figure 3 Sapstain causing fungi are vectored by burnt pine longhorn beetle

Living trees not affected by fire can support lighter populations and experience less damage.

Description

Burnt pine longhorn beetle is very similar in appearance to closely related Australian species. To avoid species confusion, correct identification should be carried out by a technical expert.

Adults

Adult burnt pine longhorn beetles are 12–30 mm long and reddish brown to black in colour. Four parallel ridges run the length of the wing cases. The antennae are half to three-quarters the length of the body (Figure 1).

Immature stages

Eggs are white, cylindrical and less than 2 mm.

Larvae (Figure 2) are about 25 mm long, white and slightly flattened in shape. Larvae have a pair of black projections at the rear of the body.

Lifecycle

Female burnt pine longhorn beetles lay up to 1000 eggs. Eggs are laid in groups of 5 to 50 in bark crevices of logs and burnt or killed trees.

Larvae hatch after 10 days and bore into the tree to feed. Larvae will bore up to 10 cm deep when population pressure is high.

Fully grown larvae prepare pupal chambers with exit holes in the surface of the bark. The exit holes are plugged with coarse strands of wood just before the larvae retreat to pupate.

Adults emerge from November to March and live for several weeks. The life cycle is usually completed in one year, but can take up to two.

Host range

The main host of burnt pine longhorn beetle is pine trees (*Pinus* spp.). Less common hosts include common spruce (*Picea abies*), Douglas fir (*Pseudotsuga menziesii*) and larch (*Larix decidua*).

Spread

Burnt pine longhorn beetle can be spread long distances as adults or larvae in imported raw or processed wood or on machinery.

Commodities that may carry burnt pine longhorn beetle include raw logs and timber, bark, wood chips, plywood, manufactured wood products and wooden packaging materials.

Burnt pine longhorn beetles can fly more than 3 km in search of new hosts. Flight occurs from dusk to midnight.

During the flight season additional biosecurity surveillance and import requirements are applied at the Australian border to vessels and commodities considered to be high risk.

Distribution

Burnt pine longhorn beetle is native to most parts of Europe, Asia and Africa. Burnt pine longhorn beetle has become established in New Zealand.

Actions to minimise risk

Put in place biosecurity best practice actions to prevent entry, establishment and spread of pests and diseases:

- keep forests and timber stockyards free of potential breeding sites such as reject logs and dead trees, especially if fire damaged
- be on the lookout for beetle activity at dusk
- practice “Come clean, Go clean”
- ensure all staff and visitors are instructed in and adhere to business management hygiene requirements
- keep records

Reporting

If you suspect burnt pine longhorn beetle:

Call the Exotic Plant Pest Hotline on
1800 084 881

Take photos not samples to minimise the risk of spreading this pest

Email clear photos with a brief explanation and contact details to
biosecurity@dpi.nsw.gov.au

An **exotic plant pest** is a disease causing organism or an invertebrate **not present in Australia** and which threatens agricultural production, forestry or native and amenity plants.

Acknowledgments

Figures 1, 2 and 3 courtesy of Phil Bendle, T.E.R.R.A.I.N, NZ

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