



Polyphagous shot-hole borer (PSHB)

Frequently Asked Questions – Treatment and Chemicals

For up-to-date PSHB information please visit the Department's website www.agric.wa.gov.au/borer.

The Pest and Disease Information Service (PaDIS) is available on **(08) 9368 3080** and padis@dpiird.wa.gov.au. Reports of suspect borers can be made to PaDIS or reported via the **MyPestGuide (MPG) Reporter app**, www.mypestguide.agric.wa.gov.au.

Is there any treatment for PSHB?

PSHB infestations can only be effectively treated through the pruning or removal of infested branches or trees, and subsequent wood chipping to less than 2.5cm in diameter.

I don't want my tree to be cut down, can I use a chemical?

No, unfortunately there are no known effective chemical treatments for PSHB.

- Bark sprays do not penetrate the tree enough to reach the beetle.
- Systemic insecticides and fungicides are unable to reach the beetle within the tree due to the disruption in the trees vascular system caused by the symbiotic *Fusarium* fungus carried by PSHB.
 - These treatments are also generally ineffective as the beetles do not feed directly on the trees.

Is there any research into future treatments?

DPIRD is currently engaged in a chemical trial to test the efficacy of certain chemicals on early infestations of PSHB.

DPIRD scientists are operating under an Emergency Permit issued by the Australian Pesticides and Veterinary Medicines Authority (APVMA).

The results of this trial will be used to inform potential non-destructive methods of eradication of PSHB in host trees with low levels of infestation. It will also be used to inform potential preventative measures to protect high value trees from becoming infested.

DPIRD is also liaising with global experts in California and South Africa to understand the latest research on treatment and preventative options.

Can I join the chemical trial?

In general, trials are being conducted on public properties, in conjunction with the associated local government.

Which chemicals are you trialling? Are they safe?

DPIRD is currently trialling a chemical called Emamectin benzoate, which presents a low risk to pollinating insects, such as bees when applied correctly. The chemical is also being directly injected into trees, not sprayed, so there is very little risk.

When applied as per supplier guidelines there is no risk to human health.

How can I protect my trees then?

The best option for protecting your trees is improving general tree health and regularly checking them for signs of pests and diseases.

- Use grass clippings or compost as mulch, as wood chips may spread PSHB.
- Provide additional water during summer as PSHB targets stressed trees.
- Disinfect pruning tools to minimise the chance of transferring diseases.
 - 70% Ethanol is the preferred disinfectant.
- Avoid moving prunings or wood products from known PSHB infestation areas.

If you do see signs of PSHB or any other pests report them to DPIRD as soon as possible via PaDIS or the MPG Reporter app.

Can I prune my trees myself?

Trees infested with PSHB must be reported to DPIRD as early as possible. The Department will manage and pay for the pruning or removals.

If you undertake general pruning in your garden, you should be aware of the Quarantine Area requirements that are currently in place to limit the spread of PSHB.

The main requirement is that wood larger than 2.5cm in diameter, or living plants with woody stems larger than 2cm in diameter must not leave the PSHB Quarantine Area

The full list of Quarantine Area requirements can be found [here](#).

Can I burn infested wood?

Burning infested wood is not recommended in this situation. Global research has shown that burning the wood can actually cause PSHB to leave the material and fly to a new host.

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