



# Polyphagous Shot Hole Borer

The polyphagous shot hole borer (pshb) is a type of ambrosia beetle that is currently infesting over 200 tree species around the country. This tiny beetle, the size of a sesame seed, does not itself kill the tree, rather it is the fungus that accompanies the beetle and grows in the borer tunnel. This fungus impacts the trees vascular system and inhibits the flow of water and nutrients within the tree.

## How to identify symptoms:

As the beetle is so tiny it is often not seen, therefore it is better to look for signs of infestation. Symptoms vary from species to species.

**FABI**

Polyphagous Shothole Borer (*Euwallacea* sp. nr. *forficatus*): symptoms vary on different tree species in South Africa



5, 6. Shotgun-like scars develop around PSHB entrance holes on London plane trees.

7. Lesions developing around entrance holes on pecan nut trees.



8. Resin oozing from new infestations on the stems of paper bark thorn trees.

9. Resin dripping down from infested areas on paper bark thorn trees.



Photo: ZW de Beer

Different trees may react differently.

Look for:

- wilted or missing leaves
- dead or dying branches
- tiny, randomly spaced holes in the bark the size of a pen tip
- these holes may have staining around them
- Or rings of white powder known as sugar volcanoes
- Or gummy like blobs oozing out of the holes.

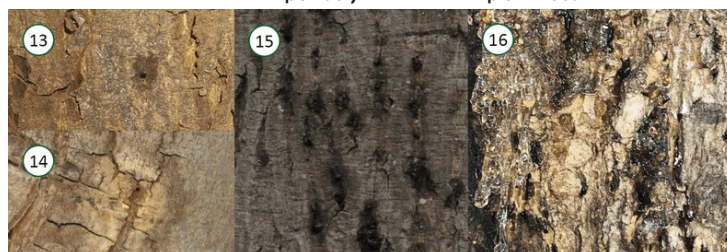


Photo: T. Paap

10. Entrance holes in castor bean.

11. Entrance holes with frass (wood powder).

12. Entrance holes with frass ('noodles') extruding on wild plum trees.



13. Fresh entrance hole with 'wet' spot on pecan nut trees, and (14) after some months.

15. Gelatinous drops oozing from entrance holes on kapok trees.

16. Gluey resin drops from entrance holes on paper bark thorn trees.



Infographic: Rizelle Stander Hartmeier

Compiled by ZW de Beer, FABI. All photos unless otherwise stated by ZW de Beer. <https://www.fabinet.up.ac.za/>



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# HELP STOP THE SPREAD!

Infested and dead trees are a breeding ground for shot hole borer (PSHB).  
Recent tests indicate that ONE heavily infested tree contains  
over 100,000 beetles.  
Dead trees need to be removed and disposed of responsibly.

## How do I dispose of infested plant material?

**METHOD 1**

- Cut infested branches into small pieces.
- Put into refuse bags and seal.
- Keep in direct sunlight, the heat from the sun will kill the insect and it's larvae.

**METHOD 2** • Chip and compost.

**METHOD 3** • Burn on site.

**METHOD 4** • Consult a tree specialist.



## BE PART OF THE SOLUTION REPORT INFESTED TREES



**WHATSAPP THE FOLLOWING TO: 064 756 2736**

### Step 1: To send a WhatsApp Location Pin:

- Turn on phone location
- Open WhatsApp
- Select Attach
- Select Location
- Select Send Your Current Location
- Send photos

### Step 2: Take photos of suspected trees from several distances.

#### Include photos of:

- The trunk or symptomatic branches
- The symptoms (close-up)
- The entry/exit hole, if visible, with a ballpoint pen for scale (remove gumming or exudate if necessary)
- If fusarium dieback is observed, include a picture of the entire tree