

## Pine (*Pinus* spp.) pests



Please note, for more details on the symptoms described for the organisms, scan the QR code to access the accompanying poster.

### Pine processionary moth (*Thaumetopoea pityocampa*)



### Introduction

Pine processionary moth (PPM) is native to southern Europe, North Africa, and parts of the Middle East. Assisted by international trade it is now established as far north as Hungary, Switzerland and the Paris region in France. There are no known established populations in the UK although single moths have occasionally been found in southern England and caterpillars have been intercepted on imported plants.

PPM caterpillars are a threat to the health of pine and some other conifer species as well as a hazard to human and animal health.

PPM caterpillars feed on the needles of pine trees and some other conifer tree species, and when present in large numbers they can severely defoliate trees. This can weaken the trees, making them more vulnerable to attack by other pests and diseases, and to environmental stresses such as drought or flood.

### Hosts

Pine trees are most susceptible to PPM and the following species are particularly susceptible: *Pinus nigra*, *P. halepensis*, *P. canariensis*, *P. contorta*, *P. pinaster*, *P. radiata*, *P. sylvestris* and *P. pinea*.

### Biology/description

PPM adults have cream forewings with brown markings, and white hindwings, but to an untrained observer they are difficult to distinguish from other moth species. They emerge and fly from about May to July. The caterpillars (pictured above) are hairy and coloured orange-brown with blue bands, and they move about in nose-to-tail processions on the trees or on the ground beneath the trees in winter and early spring.

### Symptoms

See accompanying Pine pest poster via the QR code at the top.

### More information and how to report

<https://www.forestresearch.gov.uk/tools-and-resources/fthr/pest-and-disease-resources/pine-processionary-moth-thaumetopoea-pityocampa/>

<https://www.observatree.org.uk/pests-and-diseases/priority-pests-and-diseases/pine-processionary-moth/>

# Pine tortoise scale

(*Toumeyella parvicornis*)



## Introduction

Pine tortoise scale is a North American insect where it is usually only a minor pest of pine. It can be a severe pest when introduced to new areas, for example, in recent decades it has decimated the native Caicos pine forests in the Caribbean Turks and Caicos Islands. It was first detected in Europe in southern Italy in 2015 and has since spread widely. It was recorded from south-east France in 2021.

## Hosts

It feeds exclusively on pines (*Pinus* spp.), including European species of pine. Stone pine (*P. pinea*) is highly susceptible.

## Biology/description

It is a highly adaptable species and has up to five or more generations each year, depending on climatic conditions. In southern Italy it completes three generations each year. It reproduces sexually and each adult female lays up to 1014 eggs, protected under the female body. The nymphs and adults feed on the needles and apical twigs.

## Symptoms

See accompanying Pine pest poster via the QR code at the top.

## More information and how to report

<https://gd.eppo.int/reporting/article-7021>

<https://planthealthportal.defra.gov.uk/assets/factsheets/Toumeyella-parvicornis-Defra-Plant-Pest-Factsheet-v4.pdf>

<https://www.bgci.org/resources/bgci-tools-and-resources/ipsn-posters/>

# Black pine sawyer beetle

(*Monochamus galloprovincialis*)



## Introduction

The black pine sawyer beetle is a species of beetle of the Cerambycidae family. It has a wide distribution, occurring naturally throughout Europe and the Caucasus, North Africa, China, and Mongolia. It serves as a vector for the parasitic pine-wood nematode *Bursaphelenchus xylophilus* which is an important agent of mortality for susceptible pines.

## Hosts

The most susceptible species to black pine sawyer beetle infestation are: *Picea* spp., *Pinus nigra*, *P. sylvestris* and *P. pinaster*.

## Biology/description

BPSB do not breed on healthy trees and are attracted only to stressed, dying, or recently killed trees and freshly felled timber for egg laying.

## Symptoms

See accompanying Pine pest poster via the QR code at the top.

## More information and how to report

<https://gd.eppo.int/taxon/MONCGA>

<https://www.forestresearch.gov.uk/tools-and-resources/fthr/pest-and-disease-resources/pine-wood-nematode-bursaphelenchus-xylophilus/>

## Acknowledgements

This factsheet was written by Chris Malumphy, Fera Science Ltd. Edited and produced by Lara Salido, BGCI. March 2023