

FACT SHEET



EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

Spongy moth

Description

There are two main biotypes of Spongy moth (*Lymantria dispar*): the Asian spongy moth (*L. dispar asiatica*) and the European spongy moth (*L. dispar dispar*). Their appearance is similar, although the female European spongy moth is usually flightless. This species complex occurs in regions of northern Africa, Asia, Europe, and North America.

The female moth is a large (40–70 mm wingspan), distinctive moth with wavy, dark-coloured bands across the forewings. Males are smaller (30–40 mm wingspan) and brown with darker brown patterns on the wings.

Egg masses contain 100–1000 eggs and are covered with yellowish coloured scales from the female moth. Laying of eggs on vehicles, cargo containers and ships provides a highly effective method of dispersal.

Larvae can grow to 70 mm in length, are dark, hairy and in the later instars have a characteristic double row of dots along the back: five pairs of blue followed by six pairs of red dots.

Primary hosts

The Spongy moth is an extreme generalist herbivore and is known to complete development on more than 650 species of plants from at least 24 families, including forest, orchard and ornamental trees. This host range includes both Eucalypts (*Eucalyptus*) and Pines (*Pinus*).

Symptoms

Damage from early instar larvae appears as small holes in the leaf. As the larvae grow, the holes become larger and feeding occurs along the leaf margin. In the final instar stage the larvae consume the entire leaf. Large, eruptive populations occur in cycles and appear to be more frequent in the Asian biotype. Generally, larvae feed by day in the early instars and at night from the fourth instar onwards. However, at high population densities, larvae feed continuously, day and night, until the host's foliage is completely removed. Repeated defoliations can cause tree death. Tree mortality also occurs if Spongy moth defoliation coincides with another stress, like drought.



Male (L) and female (R) adult Spongy moths



Spongy moth egg masses on a tree trunk



Larval stage of Spongy moth

The larval hairs cause allergies in some people.

What can it be confused with

The most likely stages to be observed in a plantation are the larvae. There are a number of other hairy lepidopteran caterpillars, native and exotic, that can resemble Spongy moth larvae, including some native *Lymantria* species. However, the distinctive patterning of the double row of dots along the back of larvae is reasonably diagnostic. Larvae need to be reared through to adult moths to enable specialist diagnosis. Any suspect moths or larvae should be reported.

Plant part affected

Leaves of both broad-leaved and conifer species are affected.

Age of plant

Outbreaks of Spongy moth are more driven by the prevalence of susceptible species in the landscape than by tree age.

Time of year pest is most likely to be seen

In the northern hemisphere, eggs are laid from late summer to early autumn and hatch in the following spring.

If you see anything unusual, call the Exotic Plant Pest Hotline

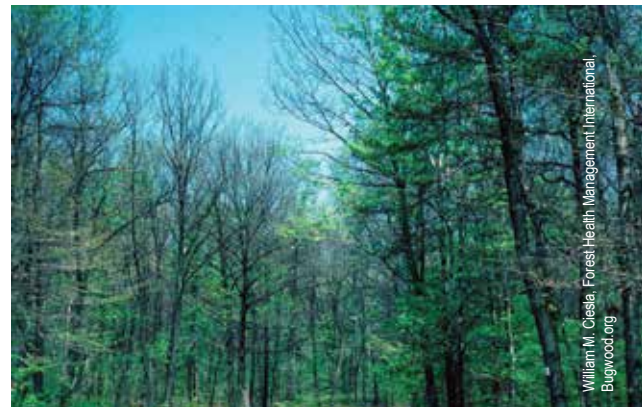


Disclaimer: The material in this publication is for general information only and no person should act, or fail to act on the basis of this material without first obtaining professional advice. Plant Health Australia and all persons acting for Plant Health Australia expressly disclaim liability with respect to anything done in reliance on this publication.



Larval stage. Note colouration

Evgeny Akulov, Russian Research Institute Of Plant Quarantine, Bugwood.org



Defoliation of broadleaved forest by Spongy moth

William M. Ciesla, Forest Health Management International, Bugwood.org

Further information

More information on Spongy moth is available from Plant Health Australia www.planthealthaustralia.com.au.

US Forest Service. Spongy moth in North America. www.fs.fed.us (search for Spongy moth).

Pests and Diseases Image Library (PaDIL) *Lymantria dispar*. Available from www.padil.gov.au/pests-and-diseases/pest/main/136285

Pests and Diseases Image Library (PaDIL) *Lymantria dispar dispar*. Available from www.padil.gov.au/pests-and-diseases/pest/main/136283