



A dead shoot caused by pine shoot beetle feeding.

Image: Steve Passoa, USDA APHIS PPQ, Bugwood.org

Common pine shoot beetle

The common pine shoot beetle *Tomicus piniperda* is a destructive shoot-boring bark beetle (Curculionidae: Scolytinae). This pest is not present in New Zealand. Help us keep common pine shoot beetle from establishing here by learning what to look for.

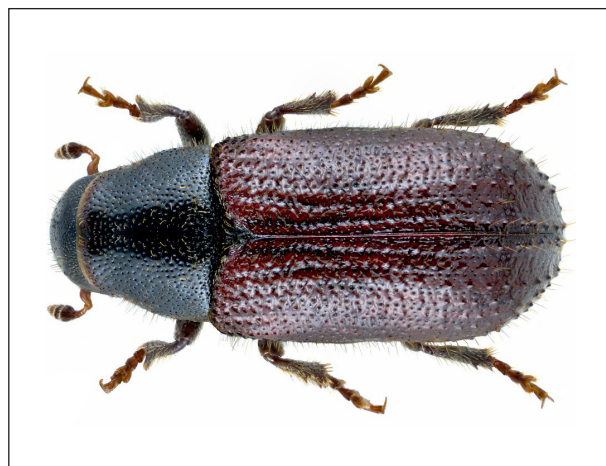


Image: U. Schmidt, 2014

An adult common pine shoot beetle (*Tomicus piniperda*).

The common pine shoot beetle is a threat to New Zealand's forestry industry. Adult beetles damage the growing tips of healthy pine trees by boring into the pith to overwinter. This results in distinctive dead tips. Larvae feed under the bark of dead or dying pine trees where they make radiating galleries which is similar to the European elm bark beetle (*Scolytus multistriatus*), but quite different to other bark beetles that attack pine in New Zealand. The beetle is native to Europe, northern Asia and northern Africa and has been accidentally introduced to eastern North America, where it is considered a serious invasive pest.

Symptoms to look for

- Dead growing tips in otherwise healthy pine trees, especially young trees.
- Adults are small (3.5-5 mm in length), black, cylindrical beetles.
- Larvae are visually indistinguishable from other bark beetle species in New Zealand.
- Larvae bore distinctive radiating galleries that do not resemble those made by other bark beetle species on pine in New Zealand.



Image: Gyorgy Csoka, Hungary Forest Research Institute, www.forestryimages.org

An exit hole in the shoot of a pine tree.



Image: Gyorgy Csoka, Hungary Forest Research Institute, www.forestryimages.org

An adult beetle within its feeding tunnel.

Hosts

In the common pine shoot beetle's native range it primarily attacks Scots pine (*Pinus sylvestris*). In Europe, it has been recorded from *Pinus radiata*, from various other European pine species, and more rarely spruce (*Picea* spp.) and larch (*Larix* spp.).

Beetle life cycle

- In spring, adults bore a vertical tunnel (8-25 cm long) under the bark in recently killed or dying trees. Up to 100 eggs are laid in this tunnel.
- After hatching, the larvae bore feeding galleries through the phloem.
- Adults emerge in late summer to feed on the pith of fast-growing shoots in healthy young trees, which then die.
- Adults typically overwinter in the thick bark near the base of large pine trees, or sometimes in the shoots.

Identification and testing

Adult beetles can be identified by comparison to specimens in well-curated collections. The identification of larvae requires either rearing to adulthood or the use of molecular sequencing techniques. The distinctive damage made by both the larvae and adults to pine trees is a strong indicator that this species may be present.

As required by the Biosecurity Act (1993), if you encounter beetles, larvae or host damage that you suspect could be common pine shoot beetle, call Biosecurity New Zealand Pest and Disease hotline - 0800 80 99 66. MPI will coordinate how best to proceed with sampling and identification.

Contact information

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