

NOTE

THE OCCURRENCE OF *SYNDESUS CORNUTUS* (F.) IN STRUCTURAL TIMBER (COLEOPTERA: LUCANIDAE)

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Abstract

Larvae and adults of *Syndesus cornutus* (F.) were found infesting a bridge support, which had been previously attacked by the brown rot polypore fungus *Trametes lilacino-gilva* (Berkeley) Lloyd.

Syndesus cornutus (F.) is a relatively common and widespread beetle in eastern Australia, occurring in rotten wood from Tasmania to North Queensland. On 3 January, 1978, a large number of adults and larvae were found causing extensive damage to a 14 cm × 30 cm piece of painted timber supporting a bridge behind the Entomology Building, CSIRO, Black Mountain, Canberra (Fig. 1). About 100 individuals were collected, but the colony was certainly much larger. A single larva of an unidentified oedemerid beetle was also collected in the wood, as well as 3 female wasps of the species *Rhopalum littorale* Turner (Sphecidae: Crabroninae). The wood was brownish, fairly soft, and crumbling, indicating that it had been previously attacked by a brown rot fungus. Closer examination revealed a small fruiting body of a bracket fungus (Basidiomycetes: Polyporaceae) between the support and the bridge planks. Although the fruiting body was in an early stage of development, a small portion of pileus surface and pore surface were available for examination. General features and microstructure indicated that the fungus is a trametoid polypore with a trimitic, pink-coloured context and belongs to a group included in *Trametes* by Cunningham (1965), in section four of the genus *Fomes* by Lowe (1957), and in the third section of the genus *Fomitopsis* by Bondarzew and Singer (1941). The number of pores per mm (about 5), thickness of the skeletal hyphae (up to 6 μ), and spore structure (more or less broadly elliptical, tending to be apiculate) indicate that the fungus is *Trametes lilacino-gilva* (Berkeley) Lloyd, which has been collected in several localities in southeastern Australia and is known to cause a brown cubical rot in charred fallen logs, worked timber, and power poles (Cunningham 1965). This identification has been confirmed by I. Pascoe of the Victoria Plant Research Institute, and the specimen has been lodged in the VPRI herbarium (No. 10994).

This unusual occurrence of Lucanidae in structural timber was undoubtedly made possible by the fungal infection, since all known members of the family require well rotted wood. Hickin (1963) mentions one record of *Dorcus parallelipedus* (L.) infesting a wooden beam and rafter in an old house, but it is likely that a rot had preceded the insect in this case as well.

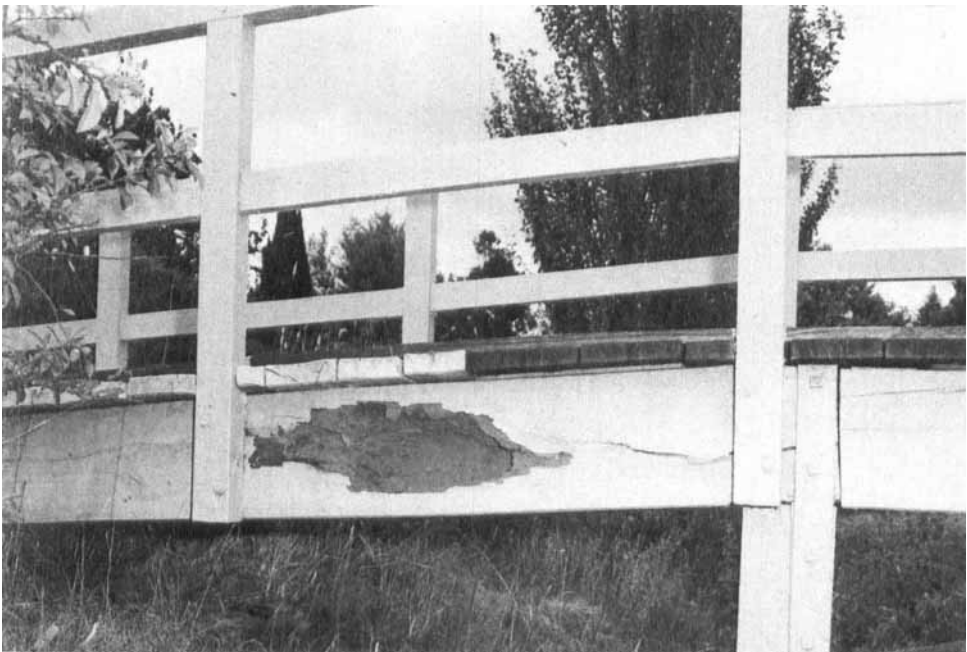


FIG. 1—Damage caused by *Syndesus cornutus* to bridge support.

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