



## New Zealand Fig longhorn beetle

### *Xylotoles griseus*



**Figure 1.** Adult *Xylotoles griseus*. The image on the left has been magnified (x6) compared to the image on the right, which is the actual size – roughly 1 cm in length and 3 mm wide; this is smaller than a 5p coin. The photo of the beetle is courtesy of Harry Taylor © Natural History Museum.

## Background

In the summer of 2013 several unusual adult longhorn beetles were seen in a private garden in Westward Ho!, Devon. In 2014 around 20 more were seen on the same site around a log pile from a felled common fig tree (*Ficus carica* L.). Some of the beetles were sent to the Natural History Museum in London, and were identified as *Xylotoles griseus* (Fabricius) (Coleoptera: Cerambycidae), the New Zealand fig longhorn, a species native to New Zealand, which had not previously been recorded in the UK or the rest of Europe. *Xylotoles griseus* feeds primarily on the dead wood of a number of tree species, and in its native range it has been recorded from elm (*Ulmus* spp.) and numerous native and exotic

trees, as well as being detected in mummified apples. A survey by the Plant Health Seeds Inspectorate (PHSI) in the summer of 2016 resulted in the collection of more than 20 adult beetles from some substantially mined dead wood (Figure 2.). The beetles were found a few hundred metres away from site of the original finding, demonstrating that the beetle is well established around Westward Ho!.

## Geographical Distribution

Native to New Zealand, its distribution includes both of the main Islands (North and South) as well as little Barrier Island and Poor Knights Island. In the UK, the beetle has only been found in one location in Devon.

## Host Plants and Biology

In New Zealand this beetle is known to feed primarily on dead wood, with *Ulmus* (elm) as the main recorded host, although adults have been found in association with various other plants including mummified apples, seed heads of *Buddleja davidii*, *Erythrina crista-galli*, *Salix* spp., *Solanum mauritianum* (a shrub native to S. America), *Pericallis x hybrid*, *Lonicera japonica* (Japanese honeysuckle) and a number of species native to New Zealand such as *Meryta sinclairii* and *Piper excelsum*. Some records suggest that this species can cause the death of some woody and herbaceous plants, but no data has been found on impacts in general. In Devon, it has only been found in dead fig wood.

Comprehensive information regarding the biology and lifecycle of this beetle is not available, but in general terms it has been observed in New Zealand that the adults emerge during the summer months (December and early January). The female beetle, in common with many other longhorn species, gnaws a pit in the bark of the host plant in which she lays her eggs. The larvae feed beneath the bark, but enter the wood to pupate. Interestingly this species is flightless, the wings being entirely vestigial. Entry to the UK is thought to have been via imported goods, or plant material.

## Description

The adult beetle (Figure 1.) is elongate oval in shape and measures up to 10.5 mm in length by 3.2 mm in width. The antennae in both sexes are long and reach past the end on the wing cases. Overall it is brown in colour with a few lighter spots on the wing cases formed by patches of lighter hairs. Because of this colouration this insect is well camouflaged against its normal substrate of dead wood (Figure 2).

## Economic Impact

In New Zealand this beetle is not considered to be an economic pest of plants, with dead wood being either the preferred or only larval habitat (Figure 3), although it is reported by

one source that this species can cause the death of some woody and herbaceous hosts, and damage timber, thus reducing its economic value.



**Figure 2.** Showing how well camouflaged adult *Xylotoes griseus* is against its natural substrate © Fera Science Ltd. 2016.



**Figure 3.** Multiple emergence holes formed by adult *Xylotoes griseus* © Fera Science Ltd. 2016.

## Advisory Information

The Fig Longhorn beetle is not known to be an economic pest therefore no statutory action is planned and there is no requirement to report findings to the authorities.

For additional information on UK Plant Health please see:

<https://secure.fera.defra.gov.uk/phiw/riskRegister/>

<https://www.gov.uk/plant-health-controls>

<http://www.gov.scot/Topics/farmingrural/Agriculture/plant/PlantHealth/PlantDiseases>

<https://www.daera-ni.gov.uk>

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