

# *Xylotoles griseus* (Fabricius, 1775) (Cerambycidae; Lamiinae), the New Zealand fig longhorn, breeding in Devon, new to Britain and Europe

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In August 2014 Warren Collum found about 20 adult longhorn beetles (Cerambycidae) around the log pile from a recently felled fig tree *Ficus carica* in his garden at Eastbourne Terrace, Westward Ho!, Devon SS437294 (VC 4). Multiple emergence holes were present in the logs, and adult beetles continued to emerge. Several similar beetles had also been seen in August 2013, but none were noted during the summer of 2015. Specimens were passed to JMW for identification. It was clear that they were not any known British cerambycid so a photograph was sent to Martin Rejzek, who confirmed that they were not a species known from Europe. A specimen was then sent to the Natural History Museum, where it was identified by MFG & MVLB as *Xylotoles griseus* (Fabricius, 1775) (Lamiinae, Parmenini), a species from New Zealand. This appears to be the first record of an imported population of this beetle breeding outside of New Zealand, and is thus a new record for the United Kingdom and for Europe. The tribe Parmenini is also unrepresented in the native British fauna.

*Xylotoles griseus* (Figs. 1 and 2), is around 10.5mm long and 3.2mm wide, an elongate-oval beetle with antennae extending beyond the apices of the elytra in both sexes. It is dark brown but clothed with lighter, greyish, recumbent pubescence, with occasional brownish patches, becoming larger and more frequent towards the apices of the elytra. The legs, antennae and elytra have regular small circular patches of browner pubescence resembling spots, and the scutellum is clothed with yellowish gold hairs; similar yellowish gold patches appear on the head adjoining the inner margin of the eyes, and semi-regularly as flecks on the elytra. It does not resemble any of the British or Northern European Lamiinae, and is remarkable in the context of the British lamiine fauna in having reduced wings and being unable to fly, an attribute shared only by the very rare *Lamia textor* (Linnaeus) (Lamiini). Flightlessness in lamiines becomes commoner further south in Europe, with other flightless Parmenini and flightless members of another non-British tribe, Dorcadiini, associated with drier habitats than occur in Britain.

In New Zealand, *X. griseus* is a polyphagous species, breeding in timber of a number of tree genera, including figs. Ślipiński & Escalona (2013) call it the 'fig longhorn' but mention that it is associated with 'many native and exotic trees'.

Dumbleton (1957) cites it from introduced elm *Ulmus*, and further trees are mentioned by Watt (1982) and Duffy (1963). It appears to be a very common and easily collected beetle in its native range; the collections of the Natural History Museum include well over 100 specimens, from both main islands of New Zealand (North and South) as well as from Little Barrier Island. Watt (1982) records it from the Poor Knights Islands, and Kuschel (1990) notes its presence in suburban habitats.



**Fig. 1** *Xylotoles griseus* (Fabricius), living example, Devon, August 2014 (Image: John Walters)

It is difficult to speculate how a flightless beetle from New Zealand, even one that is both polyphagous and abundant, came to be breeding in numbers in a Devon garden, or how it could have been introduced. New Zealand nursery plants, for example some tree ferns (*Dicksonia* etc.) are occasionally traded, often including soil. Several other New Zealand invertebrates are established in the British Isles, notably the saproxylic weevil *Euophryum confine* (Broun) (Curculionidae; Cossoninae) which is ubiquitous in damp wood over much of Britain, and the rarer *E. rufum* (Broun). Other examples include the invasive predatory flatworm *Arthurdendyus triangulatus* (Dendy) (Platyhelminthes: Geoplanidae), the subcortical beetles *Ptinella taylorae* Johnson, *P. errabunda* Johnson and *P. cavelli* (Broun) (Ptiliidae), *Pycnomerus angulatus* (Broun) (Colydiidae) recently identified from Ireland (Alexander & Anderson, 2012), and several species of stick insect (Phasmida). Some of these invertebrates are restricted to, or most abundant in, the

western British Isles where the very maritime, 'Lusitanian' climate is perhaps most suitable. A good example is the New Zealand stick insects, rather improbable additions to the British fauna, that have prospered in south-west England for many decades (Marshall & Haes, 1988).



**Fig. 2** *Xylotoles griseus* (Fabricius), Devon specimen, presented to collection of the Natural History Museum, scale lines 1mm (Image: Harry Taylor, NHM).

It remains to be seen if this record is evidence of a larger, hitherto undetected population of *Xylotoles griseus* in *Ficus* and other trees in south-west England, or



whether it is an isolated record. We hope that the publication of this discovery will encourage others to examine suitable logs and branches for characteristic oval exit holes, and to publish any further records, towards a more complete overview of this species' status in Britain.

Finally, it is significant that an invasive invertebrate species and potential pest, of unknown origin, belonging to a family that includes more than 30,000 described species worldwide, can be so quickly identified to species. This testifies to the importance of maintaining comprehensive global natural history collections such as those of the Natural History Museum, and experienced staff who are able to work with them.

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### References

- ALEXANDER, K.N. A. & ANDERSON, R. 2012. *The beetles of decaying wood in Ireland. A provisional annotated checklist of saproxylic Coleoptera*. Irish Wildlife Manuals No. 65. Dublin, Ireland: National Parks and Wildlife Service, Department of the Arts, Heritage and the Gaeltacht.
- DUFFY, E.A.J. 1963. *A Monograph of the Immature Stages of Australasian Timber Beetles (Cerambycidae)*. London: The British Museum. 236pp.
- DUMBLETON, L.J. 1957. The Immature Stages of Some New Zealand Longhorn Beetles (Coleoptera-Cerambycidae). *Transactions of the Royal Society of New Zealand* **84**: 611-628.
- KUSCHEL, G. 1990. *Beetles in a suburban environment: a New Zealand case study*. DSIR Plant Protection report (3). Auckland. 118pp.
- MARSHALL, J.A. & HAES, E.C.M. 1988. *Grasshoppers and Allied Insects of Great Britain and Ireland*. Colchester: Harley Books. 252pp.
- ŚLAPIŃSKI, S.A. & ESCALONA, H.E. 2013. *Australian Longhorn Beetles (Coleoptera: Cerambycidae) Volume 1. Introduction and Subfamily Lamiinae*. CSIRO Publishing. 504pp.
- WATT, J.C. 1982. Terrestrial arthropods from the Poor Knights Islands, New Zealand. *Journal of the Royal Society of New Zealand* **12**: 283-320.