FIRST BRITISH RECORD OF THE SHIPWORM UPEROTUS (BIVALVIA: TEREDINIDAE) FROM DRIFTWOOD ON THE LLYN PENINSULA, WALES

P. GRAHAM OLIVER¹, HARRIET WOOD¹ & ANNA M HOLMES¹

Department of Biodiversity & Systematic Biology, National Museum of Wales, Cathays Park, Cardiff, CF10 3NP

Abstract The shipworm genus Uperotus is recorded for the first time from British shores. The name U. lieberkindi (Roch, 1931) is adopted rather than U. panamensis (Bartsch, 1922). The pallets and shell are illustrated.

Key words Uperotus lieberkindi, new record, British Isles

INTRODUCTION

A small piece of driftwood, approxiamately 40x10cm, with shipworm borings was found by Harriet Wood on the strandline of Porth Neigwl (Hell's Mouth), Llyn, Wales. Although no living shipworms were found a number of shells and pallets was extracted. The pallets had strong radial ridges making them instantly recognisable as belonging to the genus *Uperotus* Guettard, 1770 (Turner, 1966, 1971). This genus has not been recorded from British waters (Smith & Heppell, 1991) and is not included in the European and Mediterranean checklist (CLEMAM, 2008). Here we illustrate the shells and pallets, and discuss their identity.

MATERIAL EXAMINED

1sh+2 associated pallets; 3x 1v+1 associated pallet; 16 pallets; 20+ valves. In driftwood (40x10cm worn log) Strandline, Porth Neigwl (Hell's Mouth), Llyn, Wales, UK; 52°48′13.97″N 4°32′35.36″W.

The shipworm *Uperotus* is represented in the Atlantic by two nominal taxa, *U. panamensis* (Bartsch, 1922) and *U. lieberkindi* (Roch, 1931), and are considered to be possibly synonymous by Turner (1966, 1971). Records of these are rare with no references in the literature post Turner, 1966 in which she includes the type descriptions and a reference to *U. lieberkindi* in Rancurel (1955). *Uperotus panamensis* is therefore only known from the Bay of Panama and *U. lieber*

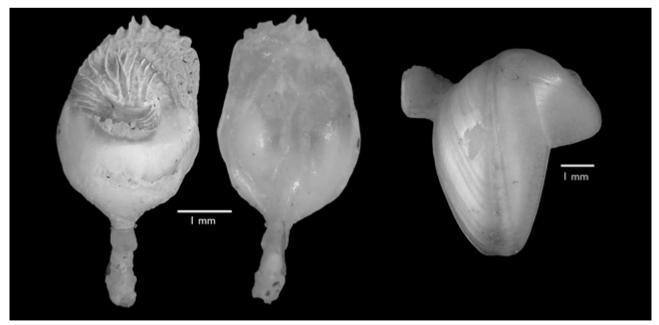


Figure 1 *Uperotus lieberkindi* Roch, Llyn, Wales, UK. A Outer face of pallete B inner face of palette C shell.

kindi from tropical West Africa.

Turner (1966) does not discuss her statement that the two Atlantic nominal taxa are synonymous but distinguishes them by the few and widely separated ridges on the anterior slope of the shell of U. panamensis (see Turner, 1966: plate 23E1) compared to the dense sculpture in U. lieberkindi (see Turner, 1966: plate 23F1). The Llyn shells (Fig.1C) are most like those of *U. liebenrocki* both in sculpture and shape. Although Turner (1966) does not discuss any differences in the pallets, her illustrations show pallets that are not identical. In U. lieberkindi the radial ridges emanate from a central swollen area (Turner 1966: plate23F3-5) but this area is not expressed in *U. panamensis* (Turner 1966: plate 23E3-4). The pallets from the Llyn (Figs 1A-B) all display the structure of *U. lieberkindi*.

Despite Turner's (1966) suggestion that there is a single species of *Uperotus* in the Atlantic, our observations link the Llyn specimens to the form represented by *U. lieberkindi* and not that of *U. panamensis*. It is suggested here that the name *Uperotus lieberkindi* be adopted for the British specimens.

It is doubtful that this species will be found living in British waters as the genus is, as yet, restriced to living in tropical seas. Many specimens of the goose barnacle *Lepas anserifera* Linnaeus, 1767 were attached to the log, all with the stalk and tissues intact. This suggests that the log was only recently stranded but despite this, there were no traces of tissue associated with the shells and pallets.

References

- BARTSCH P 1922 Monograph of the American shipworms. *Bulletin of the United States National Museum*. **122**: 1-48, pls 1-37.
- CLEMAM 2008 Checklist of European and Mediterranean Marine Mollusca. http://www. somali.asso.fr/clemam/index.clemam.html.
- RANCUREL P 1955 Teredo thomsoni Tryon et Teredo lieberkindi Roch. Transformations morphologiquesdes palettes au cour de la croissance. Bulletin d'Institut Francaise de l'Afrique Noire. **12**: 1149-1156.
- ROCH F 1931 Die Terediniden der Skandinavischen Museums-sammlungen (Stockholm, Gothenburg, Kopenhagen, Oslo, Nidaros und Tromso). *Arkiv für Zoologi*. **22A**:1-29.
- SMITH SM & HEPPELL D 1991 Checklist of British Marine Mollusca. National Museums of Scotland Information Series, No 11, Edinburgh; 114pp.
- TURNER RD 1966 A Survey and Illustrated Catalogue of the Teredinidae (Mollusca: Bivalvia). Museum of Comparative Zoology, Cambridge, Mass.; 265pp.
- TURNER RD 1971 Identification of marine wood-boring mollusks, p. 17-64. In: Jones EBG & Eltringham SK (eds), Marine borers, fungi and fouling organisms of wood. Proceedings OECD workshop, 27th March-3rd April 1968, Paris.