



The deep-sea scavenging genus *Hirondellea* (Crustacea: Amphipoda: Lysianassoidea: Hirondelleidae fam. nov.) in Australian waters

J.K. LOWRY & H.E. STODDART

Crustacea Section, Australian Museum, 6 College Street, Sydney, New South Wales, 2010, Australia (jim.lowry@austmus.gov.au, helen.stoddart@austmus.gov.au)

Abstract

The new lysianassoid amphipod family Hirondelleidae is established and the deep-sea scavenging genus *Hirondellea* is reported from Australian waters for the first time. Five new species are described: *H. diamantina* sp. nov.; *H. endeavour* sp. nov.; *H. franklin* sp. nov.; *H. kapala* sp. nov.; and *H. naturaliste* sp. nov. *Anonyx wolfendeni* Tattersall is transferred into *Hirondellea*.

Key words: Crustacea, Amphipoda, Hirondelleidae, Australia, taxonomy, new species, *Hirondellea diamantina*, *Hirondellea endeavour*, *Hirondellea franklin*, *Hirondellea kapala*, *Hirondellea naturaliste*, *Hirondellea wolfendeni*

Introduction

The hirondelleids are a world-wide group of deep-sea scavenging lysianassoid amphipods. There are currently 16 species in the family, but as the deep-sea is explored further it is highly likely that more species will be described. Based on their mouthpart morphology hirondelleids appear to be unspecialised scavengers whose relationship to other members of the lysianassoid group is not clear. In this paper we establish the family Hirondelleidae, report hirondelleids from Australian waters for the first time and describe five new species. We also transfer *Anonyx wolfendeni* Tattersall, 1909 into *Hirondellea*.

Materials and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) to the hirondelleid species of the world. The material used in this study was collected by the New South Wales Fisheries Research Vessel *Kapala*, the Museum Victoria SLOPE project (Poore *et al.* 1994) and the Australian Museum SEAS project (Lowry & Smith 2003). Material is lodged in the Australian Museum, Sydney (AM) and Museum Victoria, Melbourne (MV). Standard abbreviations on the plates are: A, antenna; C, coxa; E, epistome; EP, epimeron; G, gnathopod; H, head; MD, mandible; MX, maxilla; MP, maxilliped; P, pereopod; T, telson; U, uropod. Maxilla 1 setal-tooth classification follows Lowry & Stoddart (1990, 1992, 1995). The genus *Hirondellea* was named for the *Hirondelle*, the research ship of Prince Albert the 1st, which made an immense contribution to marine taxonomy in the late (1885–1888) 19th century. The species in this paper are similarly named after scientific research ships.

Hirondelleidae fam. nov.

Diagnostic description. *Head* exposed, much deeper than long, not extending much below insertion of antenna 2, without cheek notch. *Antennae* calceoli present in male, absent in female. *Antenna 1* with