## Phyllosoma and nisto stages of Scyllarinae sp. D (Crustacea: Decapoda: Scyllaridae) from the south-west lagoon of New Caledonia

## EMMANUEL COUTURES1 & RICHARD WEBBER2

<sup>1</sup> LERVEM, University of New Caledonia, BP 4477–98847, Nouméa, New Caledonia (email: coutures@univ-nc.nc)

<sup>2</sup> Museum of New Zealand Te Papa Tongarewa, PO Box 467, Wellington, New Zealand (email: rickw@tepapa.govt.nz)

## **Abstract**

The phyllosomas and nisto of an unknown species of Scyllarinae (Scyllarinae sp. D) are described from the lagoon at New Caledonia. Developmental stages of Scyllarinae sp D are of medium size compared to those of other scyllarine lobsters and morphologically similar to those of previously described species in the subfamily. Seven phyllosoma stages and a single nisto stage are distinguished. Phyllosomas and nistos were collected at Ricaudy Reef inside the southwest area of the lagoon, which is delimited by an almost continuous barrier reef. The entire development of Scyllarinae sp. D is likely to occur in lagoon waters. Scyllarinae sp. D probably represents one of 14 scyllarine species recorded from New Caledonia but not the five species *Eduarctus martensii* (Pfeffer, 1881), *Scammarctus batei* (Holthuis, 1946), *Galearctus timidus* (Holthuis, 1960), *G. kitanoviriosus* (Harada, 1962), *Crenarctus bicuspidatus* (De Man, 1905), for which some or all phyllosoma stages have been reliably identified. The nisto is similar to, but quite distinguishable from, that of *G. kitanoviriosus*.

Key words: Scyllaridae, Scyllarinae, larval morphology, phyllosoma, nisto, New Caledonia

## Introduction

In 2002 Dr Lipke Holthuis published a review of Indo-Pacific slipper lobsters (Scyllaridae) attributed to the genus *Scyllarus*. Indo-Pacific *Scyllarus* species were reassigned among thirteen new genera in the subfamily Scyllarinae Latreille, 1825. Species referred to *Scyllarus* prior to 2002 are here given the new generic names of Holthuis (2002).

The presence of unidentified scyllarine species in New Caledonia was recorded by Richer de Forges & Laboute (1995) but until 2002 *Eduarctus martensii* (Pfeffer, 1881) was the only New Caledonian scyllarine identified in the literature (Holthuis 1991). A further