



## Article

### **A second discovery of *Lacertopontonia chadi* Marin, 2011 (Crustacea: Decapoda: Palaemonidae), with remarks on its systematic position**

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#### **Abstract**

A second discovery of the cockscomb oyster associated shrimp species *Lacertopontonia chadi* is recorded from Sabah (Malaysia). The material is compared with the type description and paratypic material. The systematic position of the genus is reevaluated on the basis of morphological and molecular data focusing on the genera *Conchodytes* and *Chernocaris*. It is concluded that *Lacertopontonia* and *Chernocaris* fall within the present definition of *Conchodytes* and should be regarded as synonyms of the latter.

**Key words:** Crustacea, Decapoda, Palaemonidae, *Lacertopontonia*, *Conchodytes*, *Chernocaris*, taxonomy, phylogeny

#### **Introduction**

A new genus and species of bivalve associated pontoniine shrimp, *Lacertopontonia chadi* Marin, 2011, were recently described on the basis of three specimens found in association with the cockscomb oyster *Lopha cristagalli* (Linnaeus, 1758) (Bivalvia: Ostreidae) at Lizard Island, Queensland, Australia.

During a survey of pontoniine shrimp diversity in the framework of the Semporna Marine Ecological Expedition (SMEE) (Kassem *et al.* 2012), one male and one ovigerous female were collected from the same host species as the type specimens. When comparing the Semporna specimens with the type description of the species, some morphological discrepancies were noted. These features were checked against the paratype material of *L. chadi* deposited in the collections of Naturalis. Some features were indeed not present or not well developed in the paratypes, others were present though originally not noted or incorrectly described in the type description. As some of these characters were used to define the genus *Lacertopontonia* in relation to closely related genera, its generic status is reevaluated on the basis of both morphological and molecular data.

The current record of the specimens from the Semporna region, Malaysia, considerably extends the known geographical distribution of the species to the North.

The specimens are deposited in Naturalis Biodiversity Center (formerly Rijksmuseum van Natuurlijke Historie (RMNH)) and the Zoological Collection of the Oxford University Museum of Natural History (OUMNH.ZC). Post-orbital carapace length (pocl) is used as the standard measurement of size and indicated in mm.

#### **Materials and methods**

**Sample collection.** Specimens were collected during fieldwork at the Seychelles (1992), Indonesia (2005, 2009), Vanuatu (2006), and Malaysia (2010), representing a subset of species known to live in association with bivalve mollusks and solitary ascidians. The emphasis is laid on species supposed to be closely related to *Lacertopontonia chadi* (see Marin 2011), e.g. *Conchodytes* spp. and *Chernocaris placunae* Johnson, 1967. Specimens were