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Revision of *Lissoporcellana streptochiroides* (Johnson, 1970) (Crustacea: Decapoda: Anomura: Porcellanidae), with description of a new species of *Lissoporcellana* Haig, 1978 from Beibu Bay, South China Sea

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Abstract

A new porcellanid crab, *Lissoporcellana demani* n. sp. is described based on material from the Beibu Bay in the northern South China Sea. The new species can be distinguished from other congeners by the shape of rostrum, form of fixed finger of smaller cheliped and armature of lateral margins of carapace. The poorly known species *L. streptochiroides* (Johnson, 1970), which resembles *L. demani* n. sp. in carapace shape, is redescribed on the basis of examination of the syntypes from Singapore and transferred to *Pisidia* Leach, 1820.

Key words: Porcellanidae, *Lissoporcellana*, *Pisidia*, new species, South China Sea, Singapore

Introduction

The porcelain crab *Lissoporcellana streptochiroides* (Johnson, 1970) has been reported widely in the West Pacific, extending the south to the northeast of Australia and north to the East China Sea (Haig 1981, 1992; Osawa & Chan 2010). Johnson (1970) regarded his specimens from Singapore as conspecific with De Man's (1888) specimens identified as *Porcellana* (*Porcellana*) *streptochira* White, 1847 (*nomen nudum*). White's material (= *P. streptochira* Miers, 1884) was concisely described by Miers (1884), but later treated as a junior synonym of *L. quadrilobata* (Miers, 1884) (Miers 1884; Johnson 1970). As a result, *P. streptochira* had no nomenclatural standing. Johnson thus renamed his, as well as De Man's, specimens as *Porcellana* (*Pisidia*) *streptochiroides* nom. nov., which was later transferred into the genus *Lissoporcellana* Haig, 1978 and accepted as *L. streptochiroides* (Johnson, 1970) (Haig 1978; Davie 2002). Haig (1981; 1992) reported this species from the Taiwan Strait, Philippines and Indonesia, and gave illustrations based on specimens from Hong Kong. Osawa & Chan (2010) recently reported *L. streptochiroides* from the Taiwan Straits and provided a more detailed description and illustrations. We also examined large amounts of material of a *Lissoporcellana* species, most of which were collected from the Beibu Bay (or North Bay), the northern area of the South China Sea. Those specimens are consistent with Haig's (1978) and Osawa & Chan's (2010) specimens according to their figures and descriptions. We also had opportunity to examine six syntypes of *L. streptochiroides* from Singapore, finding that the syntypes were distinctly different with our specimens. As Osawa & Chan (2010) pointed out, the syntypes were more similar to *Pisidia serratifrons* (Stimpson, 1858) rather than other species of *Lissoporcellana*. Our further comparative studies show that the syntypes ought to be placed in *Pisidia* Leach, 1820, as they exhibit the typical generic characters of this genus (for more details, see Remarks of *P. streptochiroides* below). Thus, a revision of *L. streptochiroides* is required. In this paper, the syntypes of *L. streptochiroides* are assigned to *Pisidia*, and other material is treated as a new species of *Lissoporcellana*. De Man (1888)'s specimens, which are unfortunately lost, belong to the present new species of *Lissoporcellana* judging from his illustrations and description.

The type specimens of the new species are deposited in the Marine Biology Museum (MBM), in the Institute of Oceanology, Chinese Academy of Sciences, Qingdao. The syntypes of *P. streptochiroides*, are housed in the Lee

specimen has the anterior branchial margins converging posteriorly, and the median branchial margins each armed with 2 spines. The same characters were also present in Osawa & Chan's (2010) illustrations. Moreover, according to the latter authors' description, the specimen has a very shallow concavity on the anterior margin of the median lobe of the rostrum, and the carpi of the chelipeds unarmed on the entire extensor margins. These characters agree well with those of *L. demani* n. sp., indicating that Haig's and Osawa & Chan's specimens belong to the new species rather than *P. streptochiroides*.

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