CHONGXIDOTEA, A NEW GENUS FOR CLEANTIS ANNANDALEI
TATTERSALL, 1921 (ISOPODA, VALVIFERA, HOLOGNATHIDAE)

BY

WENLIANG LIU¹,²), GARY C. B. POORE³) and JIANJIAN LU¹,⁴)

¹) Chongxi Wetland Research Centre, East China Normal University, Shanghai 200062, China
²) Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China
³) Museum Victoria, GPO Box 666, Melbourne, Vic. 3000, Australia

ABSTRACT

Cleantis annandalei Tattersall, 1921 has been included in Cleantiioides Kensley & Kaufman, 1978 but was considered an aberrant representative of this genus. Here a new genus, Chongxidotea, is proposed to accommodate this species. Chongxidotea differs from all other holognathids in having a tapering body in dorsal view, both anteriorly and posteriorly, and in having a pleotelson tapering dorsoventrally and laterally to a narrow, notched apex. Pereopods 5-7 of Chongxidotea have more slender and also longer dactyli than other known holognathids.

RÉSUMÉ

Cleantis annandalei Tattersall, 1921 a été inclus dans le genre Cleantiioides Kensley & Kaufman, 1978, mais était considéré comme un représentant aberrant de ce genre. Dans ce travail, un nouveau genre, Chongxidotea, est proposé pour traiter cette espèce. Chongxidotea diffère de tous les autres Holognathidae, avec un corps s’amincissant en vue dorsale, à la fois antérieurement et postérieurement et un pléotelson se rétrécissant dorso-ventralement et latéralement en une extrémité étroite pourvue d’une échancrure. Les péréiopodes 5-7 de Chongxidotea ont des dactyles plus minces et aussi plus longs que chez les autres Holognathidae connus.

INTRODUCTION

Isopods of the family Holognathidae Thomson, 1904 have cylindrical bodies, adapted, in some species at least, for a life inhabiting a hollow seagrass stem (Hale, 1924; Kwon, 1986; Poore & Lew Ton, 1990). This shape is effected by having the body of even width throughout, and the coxal plates directed ventrally rather than lateroventrally as in most valviferans. All have a reduced pair of fourth
pereopods furnished with robust setae that would appear to assist in holding the animal in its home. One of the four genera, *Cleantioides* Kensley & Kaufman, 1978, is separated from the other three by the absence of the uropodal exopod (one ramus only) and having antennae 1 and 2 with clavate flagella, evident as a minute article much smaller than peduncle article 3 in antenna 1. These features distinguish the genus from *Cleantis* Dana, 1849 in particular. Of the 12 species of *Cleantioides*, from the eastern and northern Pacific, the Caribbean and central eastern Atlantic, and South Africa, one has long been recognized as aberrant: *Cleantis annandalei* Tattersall, 1921 has been included in *Cleantioides* but does not have the parallel-sided body and has a remarkably notched pleotelson (Kwon, 1986; Poore & Lew Ton, 1990). Here, we erect a new genus, *Chongxidotea*, to accommodate this species and also to correct earlier observations.

Some specimens were collected by Agassiz trawl in the course of a survey of the Yangtze River, and preserved in 75% alcohol. Others were obtained from Do Heon Kwon, Inje College, Pusan, Korea. The drawings were made with the aid of a drawing tube mounted on a Zeiss Stemi Sv11 compound microscope. Measurements are total body length. Specimens are deposited in the Chongxi Wetland Research Center, Shanghai, China (CWRC), and Museum Victoria, Melbourne, Australia (NMV).

**SYSTEMATICS**

**HOLOGNATHIDAE** Thomson, 1904

*Chongxidotea* gen. nov.

Type species. — *Cleantis annandalei* Tattersall, 1921, here designated.

Included species. — *Chongxidotea annandalei* (Tattersall, 1921).

Diagnosis. — Head with a deep longitudinal groove running from the anterior margin, with a transverse groove posteriorly; eyes present. Pereonite 1 shorter than head, little longer than pereonite 2. Pleonite 1 free and articulating; pleonites 2 and 3 well defined but not articulating; pleonite 4 incompletely defined laterally. Pleotelson tapering, evenly depressed dorsally from anterior, and with a narrowly notched apex. Antenna 1 flagellum a minute article, much smaller than peduncle article 3. Antenna 2 flagellum a single clavate article. Mandibular palp absent. Maxillipedal palp oval; articles 2 and 3 with a superficial suture between them (not articulating); article 5 short, broad. Dactylus of pereopod 4 minute, with short unguis. Pereopods 5-7 slender, carpi and propodi each about 5 times as long as deep, dactyli much longer than deep. Appendix masculina on male pleopod 2 apically acute. Uropod with 1 ramus.