



Notes on morphology and ecological difference between species of pontoniine shrimp genus *Crinotonia* Marin (Caridea: Palaemonidae) associated with shallow-water feather stars *Phanogenia* spp. (Crinoidea: Comasteridae)

IVAN MARIN

Laboratory of Ecology and Morphology of Marine Invertebrates, A. N. Severtzov Institute of Ecology and Evolution RAS, Leninsky prospect, 33, Moscow, 117071, Russia. E-mail: coralliodecapoda@mail.ru; vanomarin@yahoo.com.

Abstract

Freshly collected material of the pontoniine genus *Crinotonia* Marin, 2006 allows ecological separation of two known species. *Crinotonia attenuatus* (Bruce, 1971) inhabits the common yellow feather star *Phanogenia gracilis* (Hartlaub, 1890) (Crinoidea: Comasteridae) whereas *C. anastasiae* Marin, 2006 is a symbiont of the black-colored *Phanogenia* sp., probably, *Phanogenia multibrachiata* (Carpenter, 1888) or an undescribed comasterid species. The species of *Crinotonia* are also distinguished by coloration, size and depth range with *C. anastasiae* being smaller and deeper dwelling than *C. antenuatus*. Remarks on coloration, morphology and ecology of the shrimps and hosts are given.

Key words: Palaemonidae, Pontoniinae, Crinotonia, coloration, ecology, crinoids, Phanogenia

Introduction

The pontoniine genus *Crinotonia* Marin, 2006 was established for *Crinotonia anastasiae* Marin, 2006 (the type species of the genus) and *Periclimenes attenuatus* Bruce, 1971 [see Marin 2006]. The species are known as symbionts of feather-star genus *Phanogenia* Lovén, 1866 (Crinoidea: Comasteridae) and have been found living sympatrically on the same host and showing minor morphological differences in dactylar ornamentation of ambulatory pereiopods [Marin 2006]. Thus, ecological differences between these two species have been unclear.

During field work in 2006 in Nhatrang Bay, Vietnam, the author observed numerous specimens of feather stars of the genus *Phanogenia* and, as the result, data on ecology and coloration of *Crinotonia* spp. were obtained and reported below. Total body length (tl.) and postorbital carapace length (pcl.) are used as standard lengths, and are measured in millimetres (mm). Material is deposited in Zoological Museum of Moscow State University (ZMMU).

Systematic account

Family Palaemonidae Rafinesque, 1815

Subfamily Pontoniinae Kingsley, 1878

Genus Crinotonia Marin, 2006