

# A New Species of the Ghost Shrimp Family Ctenochelidae (Crustacea: Decapoda: Axiidea) from Japan

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A new species of the ghost shrimp genus *Ctenocheloides* (Decapoda: Axiidea: Ctenochelidae), *C. nomurai*, is described on the basis of two male specimens from the shallow subtidal bottom of Arita Bay, Kushimoto, Wakayama Prefecture, Japan. The new species differs from its sole known congener, *C. attenboroughi* Anker, 2010, in the structure of the carapace, the well developed crista dentata of the third maxilliped, the strongly asymmetrical chelipeds, and the chelate fifth pereopod. The two type specimens were found under a rock on soft bottom, suggesting that the new species is a burrower like other callianassooid species.

**Key Words:** Crustacea, Decapoda, Axiidea, Ctenochelidae, *Ctenocheloides*, new species, Japan.

## Introduction

Within the superfamily Callianassoidea (Decapoda: Axiidea), only two genera are characterized by a comb-like row of teeth on the cutting edge of the elongate finger of at least one cheliped, viz., *Ctenocheles* Kishinouye, 1926 and *Ctenocheloides* Anker, 2010. Both genera are currently assigned to the family Ctenochelidae, although the classification of its family and its related taxa is still in a state of flux (cf. Tudge *et al.* 2000; Lin *et al.* 2007; Anker 2010; Sakai 2011).

In 1997, Mr Keiichi Nomura of the Kushimoto Marine Park Center, Japan, collected two specimens of a very unusual ghost shrimp from a subtidal soft bottom in Arita Bay, Kushimoto, Wakayama Prefecture, during routine investigations of the fauna in local waters. These specimens have a comb-like row of teeth on each finger of the right cheliped and exhibit substantial similarities to *Ctenocheloides attenboroughi* Anker, 2010. The latter is the type species of its monotypic genus, and is represented only by the holotype from Madagascar. This paper serves to describe the second species of the genus, *C. nomurai* sp. nov., with discussion of the differentiating characters between the two species. The generic diagnosis of *Ctenocheloides* is emended to accommodate the present new species.

The type specimens are deposited in the Natural History Museum and Institute, Chiba (CBM) in Chiba, Japan. The carapace length (cl: distance from the frontal margin to the posterodorsal margin of the carapace, in mm) is used as a standard measurement. Higher classification follows that of Anker (2010).

Infraorder **Axiidea** de Saint Laurent, 1979

Superfamily **Callianassoidea** Dana, 1852

Family **Ctenochelidae** Manning and Felder, 1991

Subfamily **Ctenochelinae** Manning and Felder, 1991

*Ctenocheloides* Anker, 2010

**Type species.** *Ctenocheloides attenboroughi* Anker, 2010.

**Emended diagnosis.** Carapace with cervical groove deep or shallow, suture-like; gastric prominence present, while cardiac prominence present or absent; linea thalassinica running along entire length of carapace; frontal margin slightly convex, without rostral spine or median ridge. First pleomere without pleura; third to fifth pleomeres without setal rows. Sixth pleomere without lateral projections. Eyestalk somewhat flattened dorsoventrally; cornea well pigmented, dorsal, subterminal. Antennular peduncle shorter and not stouter than antennal peduncle. Antennal scaphocerite well developed, subacute distally. Scaphognathite of maxilla lacking long seta on posterior lobe. Second maxilliped without exopod, with small or minute epipod. Third maxilliped without exopod; ischium-merus pediform; merus with prominent spine mesially; propodus and dactylus slender. Chelipeds with ischia each bearing row of minute denticles on ventral margin; meri each with tiny denticle on ventral margin; finger of at least one side slender, longer than palm, prominently pectinate. Second pereopod chelate. Third pereopod with subrectangular propodus, with distal spine on ventral margin. Male first pleopod uniramous. Male second pleopod biramous, generally similar to third to fifth pleopods in structure, but shorter and narrower, with appendices interna and masculina arising distal to mid-length of endopod. Female first and second pleopods unknown. Third to fifth pleopods foliaceous, each with slender, digitiform appendix interna. Uropodal exopod ovate, without lateral incision, fringed with row of spinules noticeably increasing in size posteriorly.