



On two snapping shrimps, *Alpheus baccheti* n. sp. and *A. coetivensis* Coutière from the Tuamotu Islands, French Polynesia (Crustacea, Decapoda)

ARTHUR ANKER

Florida Museum of Natural History, University of Florida, Gainesville, FL 32611, USA. Email: aanker@flmnh.ufl.edu

Abstract

The present study deals with two species of the snapping shrimp genus *Alpheus* Fabricius, 1798 recently collected on a shallow reef flat of Makemo, central Tuamotu Islands, French Polynesia. *Alpheus baccheti* n. sp., is described on the basis of a single complete male specimen (holotype). The new species appears to be most closely related to the species of the *A. lobidens* de Haan, 1849 and *A. strenuus* Dana, 1852 species complexes, but can be easily distinguished from all of them by the presence of a distoventral tooth on the merus of the third and fourth pereiopods. The presence of *Alpheus coetivensis* Coutière, 1908 in the Tuamotu Islands is confirmed on the basis of several specimens from Makemo; some taxonomic remarks are provided for this species. The diagnostic colour patterns are illustrated for both *A. baccheti* n. sp. and *A. coetivensis*.

Key words: Caridea, Alpheidae, *Alpheus*, snapping shrimp, new species, Pacific, French Polynesia

Introduction

The marine shallow water fauna of the vast Tuamotu-Gambier Archipelago of French Polynesia is still relatively poorly known. The shrimp family Alpheidae is represented there by only 20 species, this number being only about 2/5 of the total number of alpheid species currently known from French Polynesia (see Poupin 1998). In 2009, a small collection of decapod crustaceans from Makemo, a large atoll in the central part of the Tuamotu Islands, was brought to the author's attention by Philippe Bacchet (Papeete, Tahiti, French Polynesia). This collection contained two interesting species of the most speciose alpheid genus, *Alpheus* Fabricius, 1798. The first species was represented by a single male specimen preliminarily identified as *Alpheus* sp. aff. *lobidens* de Haan, 1849 and later confirmed to belong to a hitherto undescribed species. The second species contained three specimens of both sexes that were identified as *A. coetivensis* Coutière, 1908, a species previously reported under the name *A. edmondsoni* (Banner, 1953) from a few localities in the western Pacific, including a tentative record from the Tuamotu Islands based on an incomplete specimen (Banner 1959; Banner & Banner 1983). An opportunity is taken here to describe the first species as new and to provide some taxonomic remarks on *A. coetivensis* and to confirm its presence in French Polynesia. In addition, the diagnostic colour patterns of both species are illustrated to enable their identification in the field.

All material, including the holotype of the new species, is deposited in the Crustacea collections of the Florida Museum of Natural History, University of Florida, Gainesville, FL, USA (FLMNH UF). All drawings were made under Leica MZ16 dissecting microscope equipped with a camera lucida. Measurements were made along the mid-dorsal line of the carapace, from the rostrum tip to the posterior margin of the carapace (CL, carapace length in mm) or the telson (TL, total length in mm). The term "spiniform seta" is here used for stout spine-like setae, sometimes inserted in pits (cuspidate setae). Abbreviations used in the text: MNHN—Muséum national d'Histoire naturelle, Paris, France; P3, P4, P5—third, fourth and fifth pereiopods.