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The shrimp genus *Salmoneus* Holthuis, 1955 (Crustacea, Decapoda, Alpheidae) in the tropical western Atlantic, with description of five new species*

ARTHUR ANKER
250A Dickinson Hall, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-7800, USA.
E-mail: aanker@flmnh.ufl.edu

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Abstract

The present study examines the diversity of the alpheid shrimp genus *Salmoneus* Holthuis, 1955 in the western Atlantic. Five species are described from the shallow waters of the Caribbean Sea: *Salmoneus hispaniolensis* sp. nov., from the southern coast of the Dominican Republic; *S. camaroncito* sp. nov. from Panama and Honduras; *S. armatus* sp. nov. from Panama; *S. degravei* sp. nov. from Panama, Colombia, Venezuela, and Tobago; and *S. wehrtmanni* sp. nov. from Panama, Honduras, Mexico (Yucatan) and Tobago. In addition, *S. ortmanni* (Rankin, 1898) is reported from new localities in Panama and Costa Rica; *S. carvachoi* Anker, 2007 from Mexico (Yucatan) and the Brazilian states of Pernambuco and Paraíba; *S. cavicolus* Felder & Manning, 1986 from Turks and Caicos Islands; and *S. setosus* Manning & Chace, 1990 from Mexico (Yucatan). Most specimens were collected at shallow depths (0.5–2 m), on soft bottoms ranging from mud-silt to coarse sand mixed rubble, under rocks or coral rubble; *S. degravei* sp. nov. appears to be associated with burrows of the callianassid ghost shrimp, *Neocallichirus grandimana* (Gibbes, 1850).

Key words: Caridea, Alpheidae, *Salmoneus*, shrimp, Caribbean, Panama, Dominican Republic, new species, western Atlantic, Callianassidae

Introduction

The shrimp genus *Salmoneus* Holthuis, 1955 is usually regarded as one of the "minor" genera of the family Alpheidae, with over 30 species worldwide (De Grave 2004; Anker & Marin 2006; Grippa 2006; Anker 2007), seven of them in the western Atlantic: *S. ortmanni* (Rankin, 1898), *S. arubae* (Schmitt, 1936), *S. cavicolus* Felder & Manning, 1986, *S. teres* Manning & Chace, 1990, *S. setosus* Manning & Chace, 1990, *S. carvachoi* Anker, 2007 and *S. rocas* Anker, 2007 (Anker 2007). Among these seven species, *S. ortmanni* and *S. carvachoi* are closely related and form, together with at least two undescribed species, the *S. ortmanni* group (see Anker & Marin 2006), which is easily distinguishable from all other groups by the expanded merus and carpus of the major cheliped. A larger and more heterogeneous species group is the *S. serratidigitus* (Coutière, 1896) group, represented in the western Atlantic by *S. teres*, *S. rocas*, *S. setosus*, and possibly *S. arubae*. This group, which includes the type species of the genus, *S. serratidigitus*, is characterised by a combination of features, including the strong asymmetry of the chelipeds, the merus and carpus of the major cheliped being non-expanded, and the eyes mostly concealed in dorsal view (see Anker & Marin 2006). *Salmoneus cavicolus* is presently the only Atlantic member of the *S. gracilipes* Miya, 1972 group, characterised by the partly exposed eyestalks and relatively slender major chelipeds (Anker & Marin 2006). The type material of *S. cavicolus* is very heterogeneous (cf. Felder & Manning 1986) and likely contains three different species (Anker, pers. obs.); therefore, *S. cavicolus sensu stricto* should be restricted to the holotype specimen.

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