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## On two new species of the shrimp genus *Salmoneus* Holthuis, 1955 (Decapoda, Caridea, Alpheidae) from the tropical eastern Pacific

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### Abstract

The present study deals two new alpheid shrimp species from the transisthmian *Salmoneus ortmanni* (Rankin, 1898) complex. *Salmoneus alvarezi* sp. nov. is described based on materials collected in Bahía Málaga, Colombia, and Punta Morales, Costa Rica, and is closely related to the western Atlantic *S. ortmanni* and *S. wehrtmanni* Anker, 2011. *Salmoneus malagensis* sp. nov. is described based on specimens from Bahía Málaga, Colombia, and beyond any doubts represents the eastern Pacific sister species of the western Atlantic *S. carvachoi* Anker, 2007. The two new species can be easily distinguished from each other by a number of morphological characters and colouration, and in addition appear to be ecologically separated. All previous records of *S. ortmanni* from the eastern Pacific are reassigned, some tentatively, to *S. alvarezi* sp. nov. based on description, illustrations or ecological data.

**Key words:** Alpheidae, *Salmoneus*, shrimp, new species, transisthmian, East Pacific, Colombia, Costa Rica

### Introduction

The alpheid shrimp genus *Salmoneus* Holthuis, 1955 dramatically increased in number of species over the last decade, due to intensive targeting of small and cryptically living caridean shrimps in various shallow-water habitats around the world. The majority of recent taxonomic studies in *Salmoneus* concerned the western Atlantic (Anker 2007, 2010, 2011a; Anker *et al.* 2013) and Indo-West Pacific (Anker & Marin 2006; Komai 2009; Anker 2011b; Komai & Anker 2012; Anker *et al.* 2014). In contrast, not much taxonomic work has been done on the eastern Pacific members of the genus, with only one species described recently (Anker 2011a).

The present study deals with the material of the *Salmoneus ortmanni* (Rankin, 1898) species group (*sensu* Anker & Marin 2006) collected in the tropical eastern Pacific. Until relatively recently (2007), *S. ortmanni* was considered to be a single, widespread, transisthmian species, ranging from Mexico to Galapagos in the eastern Pacific (e.g., Ríos 1992; Wicksten 1991; Wicksten & Hendrickx 2003), and from Bermuda to the Caribbean Sea and southern Brazil in the western Atlantic (Chace 1972; Carvacho 1979; Christoffersen 1982). However, taxonomic studies of the western Atlantic material of *S. ortmanni* (Anker 2007, 2010) showed the presence of three species in this part of the world, viz. *S. ortmanni* (Rankin, 1898), *S. carvachoi* Anker, 2007, and *S. wehrtmanni* Anker, 2010. The eastern Pacific records of *S. ortmanni* were assumed to represent at least two species different from *S. ortmanni*, *S. carvachoi* and *S. wehrtmanni* (Anker 2010). This assumption was based on a preliminary examination of the fairly abundant material of the *S. ortmanni* species group collected on the Pacific coast of Costa Rica (Punta Morales) in 2005 and Colombia (Bahía Málaga) in 2009. A more thorough examination of this material confirms the presence of two undescribed species in the eastern Pacific, one closely related to *S. ortmanni* and *S. wehrtmanni*, the other closely related to *S. carvachoi*. In the present study, these two species are described as new.

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