



TWO NEW PARASTENOCARIDID GENERA
(COPEPODA, HARPACTICOIDA) FROM SOUTH AMERICA,
INCLUDING A REVISION OF NOODT'S *COLUMBIENSIS*-GROUP AND
THE REDESCRIPTION OF *PARASTENOCARIS TAPAJOSSENSIS* NOODT, 1963

BY

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ABSTRACT

The genus *Colombocaris* is proposed for a new species discovered on submerged mosses of a high Andean lake in Colombia. The diagnostic characters of the genus mainly concern the morphology of legs, particularly the endopod of leg 2, leg 3, the endopodite of leg 4 and the peculiar leg 5, the cuticular windows of body segments and the morphology of the furca. The new genus *Noodtcaris* is proposed for three species of the *Parastenocaris columbiensis*-group, viz., *P. columbiensis*, *P. kubitzkii* and *P. roettgeri*, described from the Colombian Llanos Orientales, and for *P. tapajosensis* from the Brazilian Amazonas. This genus is well defined by the ornamentation of the caudal rami and the morphology of legs 2 to 5. The absence of endopod on female leg 3 is a diagnostic character at least for the Colombian species. A key for the identification of the species composing the new genera is provided.

Key words. — Taxonomy, phylogeny, biodiversity, meiofauna, Neotropical region

RESUMEN

Se propone el establecimiento del género *Colombocaris* para una nueva especie descubierta en musgos sumergidos de una laguna altoandina de Colombia. Los caracteres diagnósticos del género están relacionados con la morfología de las patas, en particular el endopodo de la pata 2, la pata 3, la peculiar pata 5, las ventanas cuticulares de los segmentos corporales y la furca. Se propone la creación del nuevo género *Noodtcaris* para las tres especies del grupo *Parastenocaris colombiensis* viz. *P. columbiensis*, *P. kubitzkii* y *P. roettgeri*, descritas de los Llanos Orientales de Colombia, y para

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P. tapajosensis del Amazonas Brasileiro. Este género está bien definido por la ornamentación de las ramas caudales y la morfología de las patas 2 a 5. La ausencia de un endopodo en la pata 3 de la hembras es un caracter diagnóstico para por lo menos las especies de Colombia. Se suministra una clave de identificación de las especies de los nuevos géneros.

INTRODUCTION

Copepods of the family Parastenocarididae Chappuis, 1940 (about 300 species and subspecies) (Defaye & Dussart, 2011; Gaviria-Melo et al., 2017) constitute a species-rich family of harpacticoid copepods with most species inhabiting continental water-bodies (Galassi & De Laurentis, 2004) or semi-terrestrial habitats (Reid, 1994).

Almost all members of the Parastenocarididae dwell in the hyporheic zone of rivers and lakes, phreatic waters and caves (Defaye & Dussart, 2011). A few species inhabit mosses (Boxshall & Hasley, 2004), aquatic plants (Noodt, 1962) and wet soils (Reid, 1994) in semi-terrestrial environments.

In the past, all species belonged to a single genus, *Parastenocaris* Kessler, 1913. A second genus, *Forficatocaris* Jakobi, 1969, was established by Jakobi (1969). Lang (1948) had already recognized eight different groups within the genus *Parastenocaris*. In 1972, Jakobi proposed 24 genera and accommodated therein 98 of the 155 species known worldwide at that time (Jakobi, 1972). Several years later, other genera were established, i.e., *Potamocaris* Dussart, 1979 and *Murunducaris* Reid, 1994 in South America, *Simplicaris* Galassi & De Laurentis, 2004 in Italy, *Cottarellicaris* Schminke, 2013 for several species living around the Mediterranean, *Monodicaris* Schminke, 2009 in West Africa, *Asiacaris* Cottarelli, Bruno & Berera, 2010 in Thailand and *Dussartstenocaris* Karanovic & Cooper, 2011 in Australia. Then, *Horstkutcaris* Karanovic & Lee, 2012 was proposed to include certain species from Germany, the Philippines and the Canary Islands. Finally, *Himalayacaris* Ranga Reddy, Totakura & Corgosinho, 2014 was established for one species from northern India and *Indocaris* Ranga Reddy, Totakura & Shaik, 2016 for 3 species from southeastern India.

During the first 25 years after their establishment, the genera proposed by Jakobi (1972) were not accepted as valid because he applied a very unorthodox model of orbitals based mainly on the morphology of male fourth leg (Reid, 1994). The taxonomic confusion within the family was pointed out by Schminke (1986). In the first decade of the 21st century, Corgosinho & Martínez Arbizu (2005) and Corgosinho et al. (2007) proposed to recognize Jakobi's genera, arguing that they fulfilled the requirements of the ICZN (1999). Subsequently, some genera were redefined. In the Neotropical region, Corgosinho & Martínez Arbizu (2005) re-described *Remaneicaris* Jakobi, 1972, Corgosinho et al. (2010) the genus *Brasilibathynellocaris* Jakobi, 1972 and Corgosinho et al. (2012b) the genus *Siolicaris*