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# Two new species of the genus *Munnogonium* (Isopoda: Asellota: Paramunnidae) from Argentina

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### Abstract

Two new species of paramunnid isopods from Argentina are described: *Munnogonium quequensis* **n**. **sp**. from Buenos Aires Province (Quequén) and *M. diplonychia* **n**. **sp**. from Patagonia (Comodoro Rivadavia, Rada Tilly and Puerto Deseado). Both species are distinguished from their congeners by having a tight tuft of setae on the frontal margin. These setae have been discovered after examining the specimens under scanning electron microscope; under dissecting microscope they look like a short blunt median projection. *M. diplonychia* **n**. **sp**. differs from *M. quequensis* **n**. **sp**. by having bifid claws on pereopods II–IV. Eighty of the 92 specimens of *M. quequensis* **n**. **sp**. examined were found attached to the sea star *Astropecten brasiliensis*, a fact that suggests an association between these two species.

Key words: taxonomy, Munnogonium, new species, South-West Atlantic

#### Introduction

Several paramunnid species have been assigned indiscriminately to the genera *Munnogonium* George & Strömberg, 1968 and *Austrosignum* Hodgson, 1910. Bowman and Schultz (1974) established the characters to differentiate both genera and transferred some species originally placed in *Austrosignum* to the genus *Munnogonium*. More recently, Just and Wilson (2007) revised these two genera and emended their diagnoses. At present the genus *Munnogonium* comprises five species distributed in temperate and cold waters of both hemispheres; viz.: *M. erratum* (Schultz, 1964), *M. falklandicum* (Nordenstam, 1933), *M. globifrons* (Menzies, 1962), *M. tillerae* (Menzies & Barnard, 1959) and *M. waldronense* George & Strömberg, 1968.

Herein we describe two new species of the genus *Munnogonium* from Argentina: *M. quequensis* **n. sp.** collected in Quequén (Buenos Aires Province) and *M. diplonychia* **n. sp.** collected in Comodoro Rivadavia / Rada Tilly (Chubut Province) and Puerto Deseado (Santa Cruz Province).

### Material and methods

Samples were collected with a Rauschert sledge equipped with a 1 mm mesh size. Specimens were sieved with a 250  $\mu$ m mesh, fixed with 10 % sea water buffered formalin and transferred to 70 % ethanol.

Some specimens of *M. quequensis* **n. sp.** and *M. diplonychia* **n. sp.** were stained with Chlorazole Black  $E^{*}$ , and the appendages were dissected and temporarily mounted in glycerin. Drawings of the whole animal and dissected appendages were prepared using a Carl Zeiss (Axioskop) compound microscope equipped with a camera lucida. Line drawings were rendered in digital format using a Wacom tablet and the Adobe Illustrator program after Coleman (2003). For SEM photographs, the specimens were cleaned with 0.5 % nonionic detergent Triton<sup>®</sup> X100 and ultrasound. After that, they were dehydrated through a graded series of ethanol ending in 100 %, critical point dried, gold-palladium sputter coated, and examined under a Philips XL30 TMP microscope.