

On the occurrence of the genus *Paranebalia* (Crustacea: Phyllocarida: Leptostraca) in northern Patagonia, Argentina

DANIEL ROCCATAGLIATA,^{1,5} IGNACIO L. CHIESA,^{1,2} M. PAULA RAFFO,³
& ELENA GÓMEZ SIMES⁴

¹Departamento de Biodiversidad y Biología Experimental, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, C1428EHA, Buenos Aires, Argentina

²Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Av. Ángel Gallardo 470, C1405DJR, Buenos Aires, Argentina

³Centro Nacional Patagónico (CENPAT), Boulevard Brown 2915, Puerto Madryn, U9120ACD, Chubut, Argentina

⁴Universidad Nacional de la Patagonia "San Juan Bosco", Facultad de Ciencias Naturales, Sede Puerto Madryn, U9120ACD, Chubut, Argentina

⁵Corresponding author. E-mail: rocca@bg.fcen.uba.ar

In the present study, the genus *Paranebalia* is recorded from Argentina for the first time, with a large number of specimens collected in Nuevo, San José and San Matías Gulfs, northern Patagonia, in the years 2003 to 2007 (see Fig. 1). Although these specimens agree with the diagnostic characters of *Paranebalia longipes* (Willemoes-Suhm, 1875), the description and subsequent redescriptions of this species are not sufficiently detailed for a reliable identification. Hence, we provisionally named our material as *Paranebalia cf. longipes* (see below).

The order Leptostraca contains a small number of marine species distinguished by a large bivalved carapace, an anterior hinged rostrum, eight leaf-like thoracic limbs, and seven abdominal segments. Leptostracans are known to occur in a wide variety of habitats, from hydrothermal vents and marine caves to the intertidal zone (Haney & Martin 2004).

Only four species of this order have been reported from the southern South-West Atlantic (34°–56°S): the bathypelagic *Nebaliopsis typicus* G. O. Sars, 1887 found in deep-waters off Argentina, and three species attributed to the bottom-dwelling genus *Nebalia*, viz. *N. patagonica* Dahl, 1990 from Ushuaia (Beagle Channel), *N. canioni* Dahl, 1990 from South Georgia Island and *N. falklandensis* Dahl, 1990 from the Malvinas Islands (see Cannon 1931, Geiger & Brahm 1969, Dahl 1990).

Specimens were sorted out from the sediment, fixed in 10 % buffered formalin, and then transferred to 70 % ethanol. All the material studied herein was deposited in the invertebrate collection of the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" (MACN-In). The specimens were collected at the following localities (the number of males included in each sample is reported between parentheses): *Río Negro Province*: — Off San Antonio Oeste, San Matías Gulf, coll. D. Roccagliata, 8 m, small dredge, 25 Nov 2003, 59 specimens (10 ♂♂) (MACN-In 37582). — Off San Antonio Oeste, San Matías Gulf, coll. D. Roccagliata, B. Doti, I. Chiesa and M. Diaz. Sta. 6: 40° 54.135'S, 65° 05.074'W, 15 m, Van Veen grab, 03 Jan 2005, 9 specimens (3 ♂♂) (MACN-In 37583). Sta. 8: 40° 53.362'S, 65° 03.985'W, 20 m, Van Veen grab, 03 Jan 2005, 15 specimens (MACN-In 37584). Sta. 11: 40° 55.156'S, 65° 04.268'W, Van Veen grab, 03 Jan 2005, ? m, 1 specimen (MACN-In 37585). Sta. 14: 40° 55.728'S, 65° 04.317'W, ? m, Rauschert epibenthic dredge, 05 Jan 2005, 109 specimens (27 ♂♂) (MACN-In 37586). Sta. 16: 40° 55.717'S, 65° 04.459'W, 18 m, Van Veen grab, 05 Jan 2005, 55 specimens (13 ♂♂) (MACN-In 37587). Sta. 17: 40° 55.903'S, 65° 04.484'W, 18 m, Van Veen grab, 05 Jan 2005, 13 specimens (2 ♂♂) (MACN-In 37588). Sta. 21: 40° 55.208'S, 65° 03.983'W, 18 m, Van Veen grab, 05 Jan 2005, 18 specimens (3 ♂♂) (MACN-In 37589). *Chubut Province*: — Villarino Beach, San José Gulf, coll. J. P. Lívore, 42° 24.767'S, 64° 17.267'W, 5–10 m, diver-operated suction sampler, Mar 2006, 47 specimens (4 ♂♂) (MACN-In 37590). — Villarino Beach, San José Gulf, coll. M. Brögger, 42° 24.833'S, 64° 17.333'W, 2–5 m, taken manually by divers: Dec 2005, 1 specimen (MACN-In 37591); Jul 2006, 12 specimens (MACN-In 37592); Dec 2006, 6 specimens (MACN-In 37593); Apr 2007, 77 specimens (MACN-In 37594); Aug 2007, 32 specimens (MACN-In 37595). — Off Puerto Madryn, Nuevo Gulf, coll. D. Roccagliata, B. Doti, I. Chiesa and R. Centurión, small dredge, 03 Feb 2006. Sta. 8: 42° 46.999'S, 64° 59.256'W, 9 m, 1 specimen (MACN-In 37596). Sta. 9: 42° 46.991'S, 64° 59.088'W, 12 m, 2 specimens (MACN-In 37597). Sta. 12: 42° 46.964'S, 64° 59.019'W, 10 m, 1 specimen (MACN-In 37598). — Cracker Bay, Nuevo Gulf, on the sediment and also associated with the holdfasts of the seaweeds *Macrocystis pyrifera* and *Undaria pinnatifida*, taken manually by divers, Mar 2004, 42° 56'S, 64° 27'W, 8 m (for additional sampling data, see Raffo *et al.*, 2009): 12 poorly preserved specimens (MACN-In 37599).

The adult females measured up to 6.8 mm length, whereas the adult males varied between 2.3 and 4.3 mm length.