



Revista de Biología Tropical

ISSN: 0034-7744

julianmonge@gmail.com

Universidad de Costa Rica

Costa Rica

Chiesa, Ignacio L.; Alonso, Gloria M.
Biodiversity of the Gammaridea and Corophiidea (Crustacea: Amphipoda) from the
Beagle Channel and the Straits of Magellan: a preliminary comparison between their
faunas

Revista de Biología Tropical, vol. 55, núm. 1, 2007, pp. 103-112

Universidad de Costa Rica

San Pedro de Montes de Oca, Costa Rica

Available in: <http://www.redalyc.org/articulo.oa?id=44909914>

- How to cite
- Complete issue
- More information about this article
- Journal's homepage in redalyc.org

redalyc.org

Scientific Information System

Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal

Non-profit academic project, developed under the open access initiative

Biodiversity of the Gammaridea and Corophiidea (Crustacea: Amphipoda) from the Beagle Channel and the Straits of Magellan: a preliminary comparison between their faunas

Ignacio L. Chiesa^{1,2} & Gloria M. Alonso²

1 Laboratorio de Artrópodos, Departamento de Biodiversidad y Biología Experimental, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, C1428EHA, Buenos Aires, Argentina; ichtesa@bg.fcen.uba.ar

2 Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Div. Invertebrados, Av. Ángel Gallardo 470, C1405DJR, Buenos Aires, Argentina; galonso@macn.gov.ar

Received 10-XI-2005. Corrected 25-IV-2006. Accepted 16-III-2007.

Abstract: Gammaridea and Corophiidea amphipod species from the Beagle Channel and the Straits of Magellan were listed for the first time; their faunas were compared on the basis of bibliographic information and material collected in one locality at Beagle Channel (Isla Becasses). The species *Schraderia serraticauda* and *Heterophoxus trichosus* (collected at Isla Becasses) were cited for the first time for the Magellan region; *Schraderia* is the first generic record for this region. A total of 127 species were reported for the Beagle Channel and the Straits of Magellan. Sixty-two species were shared between both passages (71.3 % similarity). The amphipod species represented 34 families and 83 genera. The similarity at genus level was 86.4 %, whereas 23 of the 34 families were present in both areas. For all species, 86 had bathymetric ranges above 100 m and only 12 species ranged below 200 m depth. In the Beagle Channel, only one species had a depth record greater than 150 m, whereas in the Straits of Magellan, 15 had such a record. The Beagle Channel and the Straits of Magellan contain 57.5 % of the species, 71 % of the genera and 77.3 % of the families of Gammaridea and Corophiidea from the entire Magellan region. Rev. Biol. Trop. 55 (Suppl. 1): 103-112. Epub 2007 June, 29.

Key words: amphipods, biodiversity, Beagle Channel, Straits of Magellan, Magellan region.

The Beagle Channel and the Straits of Magellan are two passages located in the southern tip of South America, connecting the Atlantic and Pacific Oceans (Fig. 1). Both the channel and the straits, including fjords, inner channels and inlets, are characterized by a complex coastline and different depths along their extensions (Hamamé and Antezana 1999, Pagès and Orejas 1999).

The Beagle Channel extends about 300 km; the eastern section has about 50 m depth and the western end 650 m (Colizza 1991); the bottoms of the channel are basically muddy-sandy, although in some sections predominate rocks, crushed shells and coarse sand (Brambati *et al.* 1991, Colizza 1991); the

salinity reaches values not higher than 32 psu, or varies between 27 and 31 psu (Iturraspe *et al.* 1989); the surface temperature ranges between 3-10 °C according to the season of the year (Iturraspe *et al.* 1989). The Straits of Magellan has an extension of 570 km and its depth increases from the east to the west, reaching in the western section 1 100 m; in the eastern side bottoms are mainly sandy, in the middle section these are pelitic and in the west side predominates muddy bottoms; the salinity varies between 28 and 32.5 psu; the surface temperature averages 7.3 °C (Brambati *et al.* 1991, Panella *et al.* 1991).

The Beagle Channel and the Straits of Magellan are areas of great biogeographic and

ecological importance due to their intermediate position between the Atlantic and Pacific Oceans, their proximity to the Antarctic and the influence of the sub-Antarctic currents (Knox 1994, Brandt *et al.* 1997, Gambi and Mariani 1999, Ríos *et al.* 2003).

From the biogeographic point of view, both passages are included in the Magellan region (Bastida *et al.* 1992, Lancellotti and Vásquez 2000). De Broyer and Rauschert (1999) listed a total of 206 amphipod species for this region, and recently, Chiesa *et al.* (2005) increased the number of species to 219.

The study of the Gammaridea and Corophiidea amphipods (Crustacea: Amphipoda) from the Beagle Channel and the Straits of Magellan was initiated mainly by Stebbing (1888) and Schellenberg (1931) on the basis of material collected by the RV Challenger and the Swedish Antarctic Expedition, respectively.

The aims of this contribution are to ascertain the biodiversity of the Beagle Channel and the Straits of Magellan, the bathymetric ranges of the species and the faunistic affinity between the channel and the straits.

MATERIALS AND METHODS

Part of the information on the species richness of Gammaridea and Corophiidea was obtained through specimens (a total of 2 977) collected at five localities along the Beagle Channel (Bahía Ushuaia, Isla Gable, Punta Moat, Cabo San Pío and Bahía Slogett) identified by Chiesa *et al.* (2005), and material from Isla Becasses (402 specimens), also located in the Beagle Channel (54°57'S 67°01'W; 30–40 m depth), analysed afterwards and here reported for the first time.

Other records from the Beagle Channel and those from the Straits of Magellan came from a personal compilation of previous literature, based on the following publications: Stebbing (1888), Schellenberg (1931), and De Broyer and Rauschert (1999). The catalogues by Lowry and Bullock (1976), Gonzalez (1991) and De Broyer and Jażdżewski (1993)

–based on prior published data– were also reviewed for this contribution. Moreover, most of the original descriptions were consulted. The bathymetric ranges (minimum and maximum depths) of the species taken into account were detailed when possible.

Isla Picton, Isla Nueva, and Isla Lennox were considered as part of the Beagle Channel, and Cabo Vírgenes and Punta Dungeness as belonging to the Straits of Magellan (Fig. 1); the records from these areas were also based on the literature mentioned above.

The taxonomic classification of Gammaridea and Corophiidea follows Barnard and Karaman (1991) and Myers and Lowry (2003), respectively; the families Caprellidae and Cyamidae were not considered herein. The faunistic affinity between the Beagle Channel and the Straits of Magellan was estimated using Simpson's Coefficient of Similarity: $C/N \times 100$, where C = number of shared species and N = total number of species reported from the smaller of the two groups being compared (Cheetham and Hazel 1969).

RESULTS

A total of 127 species of Gammaridea and Corophiidea were recognized in the Beagle Channel and the Straits of Magellan (Table 1). From these, 102 species were present in the Straits of Magellan and 87 in the Beagle Channel. Both areas shared 62 species, which represented 71.3 % of similarity.

The 127 amphipod species recorded from both areas were comprised by 34 families and 83 genera. A total of 25 families were reported for the Beagle Channel, whereas 32 families occurred in the Straits of Magellan. Twenty three families co-occurred in both passages. The families Ampeliscidae, Colomastigidae, Epimeriidae, Gammaridae *s.l.*, Phoxocephalopsidae, Platyschnopidae, Podoceridae, Urohaustoriidae and Zobrachoidae were present in the Straits of Magellan but not in the Beagle Channel, whereas Cyproideidae and Eophliantidae were found only in the Beagle Channel (Table 1).

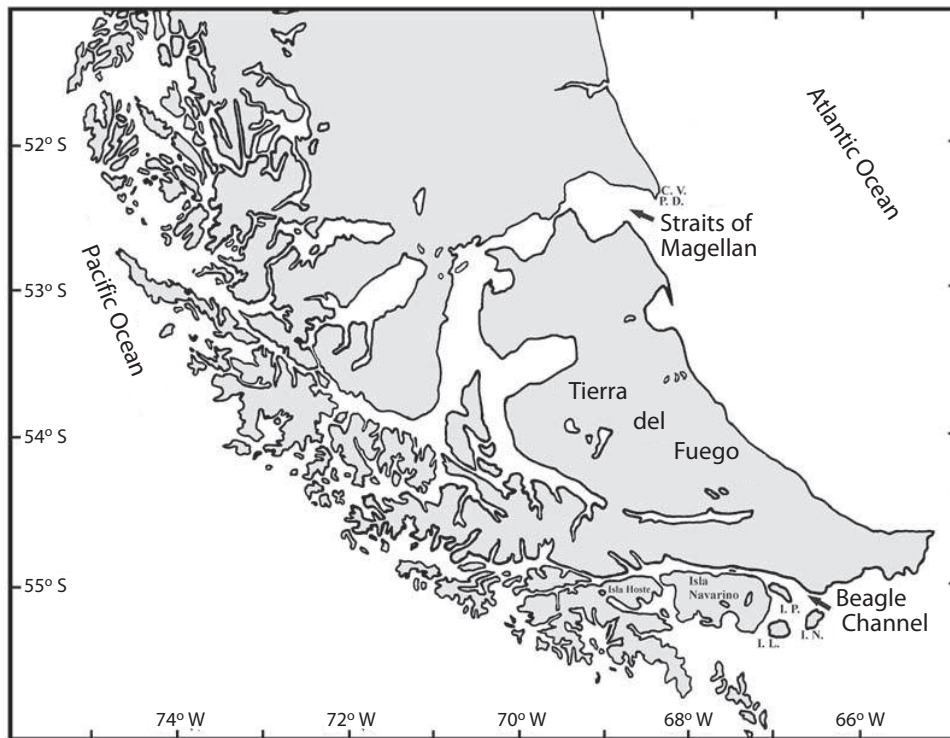


Fig. 1. Straits of Magellan and the Beagle Channel. Cabo Vírgenes (CV); Punta Dungeness (PD); Isla Picton (IP); Isla Nueva (IN); Isla Lennox (IL)

Lysianassidae *s.l.*, Phoxocephalidae, Eusiridae *s.l.* and Gammarellidae were the families with the highest number of species in both the Straits of Magellan (18, 9, 8 and 8 species, respectively) and the Beagle Channel (12, 8, 10 and 10 species, respectively).

In the Straits of Magellan, 75 genera were found, 24 of them were not present in the Beagle Channel. A total of 59 genera have been reported from the Beagle Channel, from which eight have not been recorded for the Straits of Magellan (Table 1). The Magellan Strait and the Beagle Channel shared 51 genera, representing 86.4 % of similarity.

With respect to the bathymetric range of the listed species, there was no documented depth data for 20 species present in either area or both together. For the Beagle Channel and the Straits of Magellan a total of 86 species were found in ranges shallower than 100

m depth. From these, 55 species had ranges from low tide down to 50 m depth, among which seven were recorded exclusively at low tide. Twelve species inhabited a depth range that exceeded 200 m, and only one of them (*Victorhensenoides arntzi*) was present in the Beagle Channel (Table 1).

From the total of species recorded for the Straits of Magellan, 26 had records exclusively between 0 and 50 m depth, and 30 species were found in depths below 80 m. In the Beagle Channel, 61 species were present exclusively in a range between 0 and 50 m depth, and 16 species were found in depths below 80 m. Only one species was reported from depths deeper than 150 m in the Beagle Channel, whereas in the Straits of Magellan 15 species were found below 150 m.

From Isla Becasses, 19 species of Gammaridea and Corophiidea amphipods were

TABLE 1

List of gammaridean and corophiidean amphipods present in the Straits of Magellan (SM) and the Beagle Channel (BC), including their local bathymetric ranges

	SM	Depth (m)	BC	Depth (m)
AMPELISCIDAE				
<i>Ampelisca composita</i> Schellenberg, 1931	X	?		
<i>Ampelisca dentifera</i> Schellenberg, 1931	X	58		
<i>Ampelisca gracilicauda</i> Schellenberg, 1931	X	54		
AMPHILOCHIDAE				
<i>Amphilocheirus marionis</i> Stebbing, 1888	X	?	X	15-100
<i>Gitanopsis squamosa</i> (Thomson, 1880)	X	?	X	LT
AMPITHOIDAE				
<i>Peramphithoe femorata</i> (Kroyer, 1845)	X	11-27	X	7-14
AORIDAE				
<i>Aora anomala</i> Schellenberg, 1926	X	11-18	X	4-27
B <i>Lembos argentinensis</i> Alonso, 1992			X	5-40
<i>Lembos? fuegiensis</i> (Dana, 1853)	X	11-270	X	2-4
COLOMASTIGIDAE				
<i>Colomastix fissilingua</i> Schellenberg, 1926	X	90		
COROPHIIDAE				
<i>Crassikorophium bonellii</i> Milne-Edwards, 1830	X	?	X	2-22
<i>Haplocheira balssi</i> Schellenberg, 1931	X	13-54		
B <i>Haplocheira barbimana robusta</i> K. H. Barnard, 1932			X	5-40
CYPROIDEIDAE				
<i>Victorhensenoides arntzi</i> Rauschert, 1997			X	208
DEXAMINIDAE				
<i>Atylus dentatus</i> (Schellenberg, 1931)	X	?	X	18-36
<i>Atylus villosus</i> Bate, 1862	X	21-23	X	18-36
<i>Paradexamine nana</i> Stebbing, 1914	X	90	X	18-36
<i>Polycheria acanthocephala</i> Schellenberg, 1931	X	?		
<i>Polycheria similis</i> Schellenberg, 1931	X	100		
EOPHLIANTIDAE				
<i>Bircenna fulva</i> Chilton, 1884			X	15-25
EPIMERIIDAE				
<i>Metepimeria acanthura</i> Schellenberg, 1931	X	27-90		
EUSIRIDAE s.l.				
B <i>Atyloella dentata</i> K. H. Barnard, 1932			X	15-40
B <i>Atyloella magellanica</i> (Stebbing, 1888)	X	11-270	X	5-100
<i>Eusiroides monoculoides</i> (Haswell, 1879)	X	36-54	X	5-30
B <i>Eusirus antarcticus</i> Thomson, 1880	X	11-270	X	15-100
<i>Paramoera brachyura</i> Schellenberg, 1931	X	?	X	LT
<i>Paramoera fissicauda</i> (Dana, 1852)	X	LT	X	LT-27
<i>Paramoera parva</i> Ruffo, 1949			X	?
<i>Paramoera pfefferi</i> Schellenberg, 1931	X	LT-18	X	2-30
<i>Rhachotropis schellenbergi</i> Andres, 1982	X	27		

TABLE 1 (Continued)

List of gammaridean and corophiidean amphipods present in the Straits of Magellan (SM) and the Beagle Channel (BC), including their local bathymetric ranges

B <i>Schraderia serraticauda</i> (Stebbing, 1888)			X	30-40
<i>Tylosapis dentatus</i> (Stebbing, 1888)	X	99-270	X	4-100
EXOEDICEROTIDAE				
<i>Bathyporeiapus magellanicus</i> Schellenberg, 1931	X	4	X	?
<i>Exoediceropsis chiltoni</i> Schellenberg, 1931	X	?		
<i>Metoediceros fuegiensis</i> Schellenberg, 1931	X	?		
GAMMARELLIDAE				
<i>Austroregia batei</i> (Cunningham, 1871)	X	?		
<i>Austroregia huxleyana</i> (Bate, 1862)	X	?	X	18-54
<i>Austroregia regis</i> (Stebbing, 1914)	X	11-90	X	5-54
<i>Chosroes incisus</i> Stebbing, 1888	X	?	X	?
<i>Gondogeneia antarctica</i> (Chevreux, 1906)	X	?	X	15-54
<i>Gondogeneia gracilicauda</i> (Schellenberg, 1931)			X	15-25
<i>Gondogeneia macrodon</i> (Schellenberg, 1931)	X	?	X	LT-14
<i>Gondogeneia patagonica</i> Alonso, 1986			X	15-27
<i>Gondogeneia simplex</i> (Dana, 1852)	X	LT-180	X	LT
<i>Gondogeneia thurstoni</i> Alonso, 1989			X	LT-27
<i>Gondogeneia ushuaiae</i> (Schellenberg, 1931)	X	?	X	?
GAMMARIDAE s.l.				
<i>Maera eugeniae</i> Schellenberg, 1931	X	58		
HYALIDAE				
<i>Apohyale hirtipalma</i> (Dana, 1852)	X	LT	X	LT
IPHIMEDIIDAE				
B <i>Iphimedia magellanica</i> Watling & Holman, 1980			X	15-40
B <i>Iphimedia multidentata</i> (Schellenberg, 1931)	X	27	X	5-40
<i>Pariphimedia normani</i> (Cunningham, 1871)	X	11-18	X	15-27
<i>Pseudiphimediella glabra</i> (Schellenberg, 1931)	X	18-270	X	5-30
<i>Pseudiphimediella nodosa</i> (Dana, 1852)	X	11-54	X	15-35
ISCHYRO CERIDAE				
<i>Ischyrocerus</i> sp. n.			X	15-27
<i>Jassa alonsoae</i> Conlan, 1990			X	?
<i>Jassa justii</i> Conlan, 1990			X	3-14
<i>Pseudischyrocerus denticauda</i> Schellenberg, 1931	X	180	X	5
<i>Ventojassa georgiana</i> (Schellenberg, 1931)	X	?	X	15-27
LEUCOTHOIDAE				
<i>Leucothoe spinicarpa</i> (Abildgaard, 1789)	X	18-270	X	18-125
LILJEBORGIIDAE				
<i>Liljeborgia longicornis</i> (Schellenberg, 1931)	X	?		
B <i>Liljeborgia macrodon</i> Schellenberg, 1931	X	11-54	X	5-40
B <i>Liljeborgia octodentata</i> Schellenberg, 1931	X	11-180	X	5-40
LYSIANASSIDAE s.l.				

TABLE 1 (Continued)

List of gammaridean and corophiidean amphipods present in the Straits of Magellan (SM) and the Beagle Channel (BC), including their local bathymetric ranges

<i>Acontiosoma marionis</i> Stebbing, 1888	X	?		
<i>Aristias antarcticus</i> Walker, 1906	X	270	X	125-140
B <i>Erikus dahli</i> Lowry & Stoddart, 1987			X	5-40
<i>Eurythenes gryllus</i> (Lichtenstein, 1822)	X	?		
<i>Lysianopsis subantarctica</i> (Schellenberg, 1931)	X	27-90	X	11-27
<i>Orchomenella</i> (<i>Orchomenopsis</i>) <i>cavimana</i> (Stebbing, 1888)			X	60-115
<i>Orchomenella</i> (<i>Orchomenopsis</i>) <i>chilensis</i> (Heller, 1865)	X	11-36	X	10-115
<i>Pachychelium schellenbergi</i> Lowry, 1984	X	?	X	1-18
<i>Parawaldeckia kidderi</i> (Smith, 1876)	X	LT	X	2-22
<i>Socarnoides unidentatus</i> (Schellenberg, 1931)	X	?		
<i>Stenia magellanica</i> Dana, 1852	X	2-3		
<i>Stephensenia haematopus</i> Schellenberg, 1928	X	?		
<i>Stomaccontion pepinii</i> (Stebbing, 1888)	X	5-90	X	30-35
<i>Tryphosella?</i> <i>paramoi</i> (Schellenberg, 1931)	X	?		
<i>Tryphosella?</i> <i>serrata</i> (Schellenberg, 1931)	X	27-55	X	18-55
<i>Tryphosella schellenbergi</i> (Schellenberg, 1931)	X	4-54	X	LT-115
B <i>Tryphosites chevreuxi</i> Stebbing, 1914	X	4-270	X	2-115
<i>Tryphosoides falcatus</i> Schellenberg, 1931	X	?		
<i>Uristes serratus</i> Schellenberg, 1931	X	11-18		
<i>Uristes subchelatus</i> (Schellenberg, 1931)	X	18-54		
<i>Uristes</i> sp. n.			X	5-17
OCHLESIDAE				
B <i>Curidia magellanica</i> Coleman & J. L. Barnard, 1991	X	92-101	X	30-40
OEDICEROTIDAE				
<i>Monoculopsis vallentini</i> Stebbing, 1914	X	LT-4	X	5-9
<i>Oediceroides lahillei lahillei</i> Chevreux, 1911	X	?	X	35
PHOTIDAE				
B <i>Gammaropsis</i> (<i>Gammaropsis</i>) <i>deseadensis</i> Alonso, 1981			X	15-40
<i>Gammaropsis</i> (<i>Gammaropsis</i>) <i>longicornis</i> Walker, 1906	X	?		
<i>Gammaropsis</i> (<i>Gammaropsis</i>) <i>longitarsus</i> (Schellenberg, 1931)			X	7-100
<i>Gammaropsis</i> (<i>Gammaropsis</i>) <i>monodi</i> (Schellenberg, 1931)	X	?	X	LT
<i>Gammaropsis</i> (<i>Gammaropsis</i>) <i>triodon</i> (Schellenberg, 1926)	X	?		
B <i>Gammaropsis</i> (<i>Paranaenia</i>) <i>dentifera</i> (Haswell, 1879)	X	36	X	5-100
<i>Photis</i> (<i>Photis</i>) sp. n.			X	15-25
PHOXOCEPHALIDAE				
<i>Fuegiphoxus abjectus</i> J. L. Barnard & C. M. Barnard, 1980	X	36-55		
<i>Fuegiphoxus fuegiensis</i> (Schellenberg, 1931)	X	0-90	X	LT-35
B <i>Heterophoxus trichosus</i> K. H. Barnard, 1932			X	30-40
<i>Heterophoxus videns</i> K. H. Barnard, 1930	X	5-14	X	5-45
<i>Metharpinia longirostris</i> Schellenberg, 1931	X	?		
<i>Microphoxus cornutus</i> (Schellenberg, 1931)	X	4-14	X	LT-30
<i>Parafoxiphalus longicarpus</i> Alonso de Pina, 2001			X	5-30

TABLE 1 (Continued)

List of gammaridean and corophiidean amphipods present in the Straits of Magellan (SM) and the Beagle Channel (BC), including their local bathymetric ranges

B <i>Phoxorgia sinuata</i> (K. H. Barnard, 1932)	X	13-54	X	5-54
<i>Proharpinia antipoda</i> Schellenberg, 1931	X	18-270	X	5-45
<i>Proharpinia stephensi</i> (Schellenberg, 1931)	X	?	X	4-30
<i>Pseudharpinia dentata</i> Schellenberg, 1931	X	?		
PHOXOCEPHALOPSIDAE				
<i>Phoxocephalopsis gallardoi</i> J. L. Barnard & Clark, 1984	X	112		
<i>Phoxocephalopsis zimmeri</i> Schellenberg, 1931	X	4		
PLATYISCHNOPIDAE				
<i>Eudevenopus gracilipes</i> (Schellenberg, 1931)	X	30-50		
PODOCERIDAE				
<i>Podocerus cristatus rotundatus</i> Schellenberg, 1931	X	180		
SEBIDAE				
<i>Seba saundersii</i> Stebbing, 1875	X	99	X	5-30
<i>Seba subantarctica</i> Schellenberg, 1931	X	?	X	5-100
<i>Seba typica</i> (Chilton, 1884)			X	15-27
STEGOCEPHALIDAE				
<i>Andaniotes linearis</i> K. H. Barnard, 1932	X	90-270	X	100
STENOTHOIDAE				
<i>Metopoides magellanicus</i> (Stebbing, 1888)	X	99		
B <i>Probolisca elliptica</i> (Schellenberg, 1931)			X	15-100
B <i>Probolisca nasutigenes</i> (Stebbing, 1888)			X	15-40
<i>Probolisca ovata</i> (Stebbing, 1888)	X	99	X	4-35
<i>Torometopa compacta</i> (Stebbing, 1888)	X	99-270		
<i>Torometopa crenatipalmata</i> (Stebbing, 1888)	X	99		
<i>Torometopa parallelocheir</i> (Stebbing, 1888)	X	99		
TALITRIDAE				
<i>Orchestia scutigera</i> Dana, 1852	X	LT	X	LT
<i>Protorchestia nitida</i> (Dana, 1852)	X	LT	X	LT
<i>Transorchestia chiliensis</i> (Milne-Edwards, 1840)	X	LT	X	LT
UROHAUSTORIIDAE				
<i>Huarpe escofeti</i> J. L. Barnard & Clark, 1982	X	11-12		
UROTHOIDAE				
<i>Urothoe falcata</i> Schellenberg, 1931	X	?	X	15-35
ZOBACHOIDAE				
<i>Chono angustiarum</i> Clark & J. L. Barnard, 1987	X	4-11		
<i>Tonocote introflexidus</i> Clark & J. L. Barnard, 1988	X	11		
<i>Tonocote magellani</i> Clark & J. L. Barnard, 1986	X	11-12		

?: without documented depth data; LT: low tide. Species collected in Isla Becasses (B)

identified; from these, *Curidia magellanica* is a new record for the Beagle Channel, and two species (*Schraderia serraticauda* and *Heterophoxus trichosus*) are cited for the first time for the Magellan region (Table 1).

DISCUSSION

The knowledge of the amphipod fauna from both passages is dispersed in several taxonomic papers (Schellenberg 1931, Lowry and Bullock 1976, Gonzalez 1991, De Broyer and Jazdzewski 1993 and De Broyer and Rauschert 1999). The present contribution provides the first comprehensive list of the gammaridean and corophiidean amphipod species from the Beagle Channel and the Straits of Magellan, and the first preliminary comparison between their faunas.

The study of the material from Isla Becasses in the Beagle Channel yielded two new records of species for the entire Magellan region, *Schraderia serraticauda* and *Heterophoxus trichosus*; these records increase the number of species from 219 (Chiesa *et al.* 2005) to 221 in the Magellan region. *S. serraticauda* was previously known from the sub-Antarctic islands (Auckland and Macquarie islands) and *H. trichosus* from the West Antarctic (Bransfield Strait and South Shetland islands); moreover, *Schraderia* represents the first record of the genus for the Magellan region.

The species reported as *Uristes serratus* (Schellenberg, 1931) for the Argentine sector of the Beagle Channel (Bahía Ushuaia) by Chiesa *et al.* (2005) is a new undescribed species. This is the first record of *Uristes* for the Beagle Channel.

All the amphipod families lacking in the Straits of Magellan and the Beagle Channel, but present in the rest of the Magellan region, were characterized by their low diversity in this region, since they only comprised one or two species (De Broyer and Rauschert 1999). On the contrary, *Lysianassidae s.l.*, one of the most speciose families in the entire Magellan region (De Broyer and Rauschert 1999), was

also well represented in the areas analysed by us. The absence of Ampeliscidae in the Beagle Channel is relative, since Chiesa *et al.* (2005) found one species (afterwards it was concluded that they could be two) in a locality in the vicinity of the Beagle Channel (Bahía Aguirre).

The genera *Ampelisca* (Ampeliscidae), *Polycheria* (Dexaminidae), *Torometopa* (Stenothoidae) and *Tonocote* (Zobrachoidae) with more than one species, have been reported only for the Straits of Magellan.

The higher number of species reported only from shallow waters of the Beagle Channel and the Straits of Magellan and the low number found in deeper waters indicate the necessity of collecting material at depths below 100 m in both passages, especially in the Beagle Channel, where only one species (*Victorhensenoides arntzi*) was found at a depth about 150 m. In general, more extensive sampling in the channel and the straits would allow a more accurate estimation of the bathymetric ranges of the species.

Although the Magellan region amphipod fauna of Gammaridea and Corophiidea is far from being well known, it is remarkable that 57.5 % of the species, 71 % of the genera and 77.3 % of the families from the Magellan region (De Broyer and Rauschert 1999, Chiesa *et al.* 2005) are present in both the Beagle Channel and the Straits of Magellan. These comparatively high percentages, estimated for the southern tip of South America, could be due to the fact that this area has been more intensively sampled than the northern part of the Magellan region (Atlantic and Pacific Oceans).

It is expected that the results on species richness and faunistic affinities obtained here will be modified as new samples from the Beagle Channel and the Straits of Magellan are studied; the existence of several still undescribed taxa (new genera and species) and new records listed by De Broyer and Rauschert (1999) for the Beagle Channel, the Straits of Magellan and adjacent magellanic waters, also support this hypothesis.

ACKNOWLEDGMENTS

We thank the staff of the Base Naval Ushuaia for their logistic support; Gustavo Lovrich for his kind help with the survey arrangements and Diego Zelaya for his comments on the manuscript. This study was partially supported by the Agencia Nacional de Promoción Científica y Tecnológica (PICT No. 11.180).

RESUMEN

Se confeccionó el primer listado de anfípodos Gammaridea y Corophiidea del Canal Beagle y del Estrecho de Magallanes, y se compararon, en forma preliminar, sus faunas con base en información bibliográfica y material recolectado en una localidad del Canal Beagle (Isla Becasses). Las especies *Heterophoxus trichosus* y *Schraderia serraticauda* (recolectadas en Isla Becasses) son citadas por primera vez para la región magallánica; *Schraderia* representa el primer registro genérico para dicha región. Un total de 127 especies fueron registradas para el Canal Beagle y el Estrecho de Magallanes, compartiendo entre ambos 62 especies, lo que representa una similitud del 71.3 %. El total de las especies pertenece a 34 familias y 83 géneros. La similitud a nivel genérico fue del 86.4 %, mientras que 23 familias estuvieron presentes en ambos pasajes. Del total de especies, 86 presentaron rangos de profundidad menores a los 100 m y sólo 12 especies superaron los 200 m. Sólo una especie tuvo un registro superior a los 150 m de profundidad en el Canal Beagle, mientras que 15 superaron dicha profundidad en el Estrecho de Magallanes. En el Canal Beagle y el Estrecho de Magallanes se registró el 57.5 % de las especies, 71 % de los géneros y 77.3 % de las familias conocidas para la región magallánica.

Palabras clave: anfípodos, biodiversidad, Canal Beagle, Estrecho de Magallanes, región magallánica.

REFERENCES

- Barnard, J.L. & G.S. Karaman. 1991. The families and genera of marine gammaridean Amphipoda (except marine gammaroids). Part 1 & 2. Rec. Aust. Mus. Suppl. 13: 1-866.
- Bastida, R., A. Roux & D.E. Martinez. 1992. Benthic communities of the Argentine continental shelf. Oceanol. Acta 15: 687-698.
- Brambati, A., G. Fontolan & U. Simeon. 1991. Recent sediments and sedimentological processes in the Strait of Magellan. Boll. Oceanol. Teor. Appl. 9: 217-259.
- Brandt, A., K. Linse & U. Weber. 1997. Abundance and diversity of peracarid taxa (Crustacea: Malacostraca) along a transect through the Beagle Channel. Polar Biol. 18: 83-90.
- Cheetham, A.H. & J.E. Hazel. 1969. Binary (presence-absence) similarity coefficient. J. Paleontol. 5: 1130-1136.
- Chiesa, I.L., G.M. Alonso & D.G. Zelaya. 2005. Species richness and faunistic affinities of the Gammaridea and Corophiidea (Amphipoda) from shallow waters of southern Tierra del Fuego, Argentina: preliminary results. Sci. Mar. 69: 167-174.
- Colizza, E. 1991. Preliminary report on coastal morphology and sea-bottom sediments of the Canales Beagle, Ballenero, Brecknock, Cockburn and Magdalena. Boll. Oceanol. Teor. Appl. 9: 273-279.
- De Broyer, C. & K. Jazdzewski. 1993. Contribution to the marine biodiversity inventory. A checklist of the Amphipoda (Crustacea) of the Southern Ocean. Doc. Trav. Inst. Roy. Sci. Nat. Belg. 73: 1-154.
- De Broyer, C. & M. Rauschert. 1999. Faunal diversity of the benthic amphipods (Crustacea) of the Magellan region as compared to the Antarctic (preliminary results). Sci. Mar. 63: 281-293.
- Gambi, M.C. & S. Mariani. 1999. Polychaetes of the soft bottoms of the Straits of Magellan collected during the Italian oceanographic cruise in February-March 1991. Sci. Mar. 63: 233-242.
- Gonzalez, E. 1991. Actual state of gammaridean Amphipoda taxonomy and catalogue of species from Chile. Hydrobiologia 223: 47-68.
- Hamamé, M. & T. Antezana. 1999. Chlorophyll and zooplankton in microbasins along the Straits of the Magellan-Beagle Channel passage. Sci. Mar. 63: 35-42.
- Iturraspe, R., G. Bujalesky & A. Coronato. 1989. Hidrología y variables climáticas del territorio de Tierra del Fuego. Información básica. CADIC Contr. Cient. 7: 1-196.
- Knox, G.A. 1994. The Biology of the Southern Ocean (Studies in Polar Research). Cambridge University, Cambridge, England. 444 p.

- Lancellotti, D.A. & J.A. Vásquez. 2000. Zoogeografía de macroinvertebrados bentónicos de la costa de Chile: contribución para la conservación marina. *Rev. Chil. Hist. Nat.* 73: 99-129.
- Lowry, J.K. & S. Bullock. 1976. Catalogue of the marine gammaridean Amphipoda of the Southern Ocean. *Bull. Roy. Soc. New Zeal.* 16: 1-187.
- Myers, A.A. & J. K. Lowry. 2003. A phylogeny and a new classification of the Corophiidea Leach, 1814 (Amphipoda). *J. Crust. Biol.* 23: 443-485.
- Pagès, F. & C. Orejas. 1999. Medusae, siphonophores and ctenophores of the Magellan region. *Sci. Mar.* 63: 51-57.
- Panella, S., A. Michelato, R. Perdicaro, G. Magazzù, F. Decembrini & P. Scarazzato. 1991. A preliminary contribution to understanding the hydrological characteristics of the Strait of Magellan: Austral Spring 1989. *Boll. Oceanol. Teor. Appl.* 9: 107-126.
- Ríos, C., E. Mutschke & E. Morrison. 2003. Biodiversidad bentónica sublitoral en el estrecho de Magallanes, Chile. *Rev. Biol. Mar. Oceanogr.* 38: 1-12.
- Schellenberg, A. 1931. Gammariden und Caprelliden des Magellangebietes, Südgeorgiens und der Westantarktis. *Furth. Zool. Res. Swed. Antarc. Exped.* (1901-1903) 2: 1-290.
- Stebbing, T.R.R. 1888. Report on the Amphipoda collected by H.M.S. Challenger during the years 1873-1876. *Rep. Sci. Res. Voy. H.M.S. Challenger (1873-1876)* 29: 1-1737.