

The Gammaridea are highly diversified in the Magellan Region where a total of 206 species has been reported. However, most of the studies deal with the fauna from Chile and just a few with that from Argentina. The objective of the present contribution is to analyse the diversity and the faunistic affinities of the Gammaridea from southern Tierra del Fuego, Argentina.

Samples were collected at 7 stations, at about 30 m depth, along the Beagle Channel (between Bahía Ushuaia and San Pío Cape) and in Bahía Aguirre and Bahía Buen Suceso. A total of 3,823 specimens, including 18 families, 43 genera and 61 species, was identified.

The following families showed the highest number of species (number of species in brackets): Corophiidae (8), Phoxocephalidae (7), Eusiridae (7), Gammarellidae (6), Iphimediidae (6) and Lysianassidae (5). Furthermore, Corophiidae, Stenothoidae, Lysianassidae and Eusiridae were the most abundant families (1,010; 887, 565 and 458 specimens, respectively). Although Stenothoidae is the most speciose family in the Magellan Region, only 3 *Probolisca* species (all of them very abundant) were recognized during this study. The remaining 11 families exhibited a relatively low abundance and species diversity.

Gondogeneia (Gammarellidae) and *Gammaropsis* (Corophiidae) were the most diversified genera, with 5 and 4 species, respectively. *Cephalophoxoides* and *Parafoxiphalus* (Phoxocephalidae), *Ceradocopsis* (Gammaridae s.l.) and *Photis* (Corophiidae s.l.) are recorded for the first time in the Magellan Region. Moreover, 3 species belonging to the genera *Atylus*, *Ischyrocerus* and *Photis* appear to be new to science.

The gammaridean fauna studied here was compared with those from Antarctica, Scotia Sea, Sub-Antarctic Islands, and localities North to the Magellan Region in Argentina and Chile. The following results were obtained: 17 species (40.5%) are only known from the Magellan Region; 10 species (23.8%) present in the Magellan Region are also found in the Antarctic, Sub-Antarctic Islands or Scotia Sea; 6 species (14.3%) are distributed from the Magellan Region towards the North; 4 species (9.5%) from the Magellan Region were reported both towards the North and South; and 5 species (11.9%) were also found in areas other than those here analysed.

Cumaceans from the Bellingshausen Sea and neighbouring waters

Corbera, J.¹ & Ramos, A.²

¹ Gran 90, Argentona, ES, corbera@sct.icnet.es

² Instituto Español de Oceanografía, Málaga, ES, bentart@ma.ieo.es

Introduction

Peracarids (amphipods, isopods, mysids, cumaceans and tanaids) are, together with copepods and euphausiids, the most successful group of crustaceans in Antarctic waters. Although cumaceans do not show the diversity observed in amphipods and isopods, they have a high level of endemism (up to 91%). Antarctic cumaceans have been studied since the earlier expeditions, however, the fauna of some areas (including East Antarctica and the Bellingshausen Sea) is still poorly known.

Results

During BENTART-03 cruise, 19 stations ranging from 87 to 2086 m depth were sampled using a modified version of the Macer-GIROQ sled. This sled was equipped with an opening-closing system and with three superposed nets of 0.5 mm mesh size that sampled in three water layers: 10-50 cm, 55-95 cm and 100-140 cm above the sea floor. The stations were located in the Bellingshausen Sea and neighbouring waters (Thurston Island, Peter I Island and W Antarctic Peninsula). Additional data were obtained from box-corer samples.

A total of 106 specimens belonging to 16 species of five families were collected in 13 of 19 stations sampled with the suprabenthic sledge and in six box-corer samples (Table 1). *Cumella australis*, *Vaunthompsonia laevifrons/inermis* and *Eudorella gracilior* showed the highest abundances (22, 19 and 13 specimens respectively) and *Vaunthompsonia laevifrons/inermis* was the most frequently collected species (in four sledge and two box-corer samples). Cumaceans showed a clear vertical distribution gradient with a decrease in abundance from 10-50 cm (75%) to the 100-140 cm water layers (6%), and 8 species were only collected in the nearest bottom water layer (10-50 cm).

Three species, *Cumella australis*, *Vaunthompsonia laevifrons* and *Campylaspis* sp. A, were only collected at stations shallower than 400 m, and the rest of species were only collected on deeper bottoms.

Discussion

The sampling with the suprabenthic sledge provided a low number of cumaceans. However, the number of species (16) was comparatively high. Cumaceans found during the BENTART-03 cruise show different biogeographic patterns (Figure 1). Two species are widely distributed: *Hemilamprops pellucidus* has been recorded from South Africa, Australia and New Zealand, and *Campylaspis quadriplicata* from High Antarctic and Subantarctic waters including the Magellan region. *Cyclaspis gigas*, *Cumella australis*, *Leucon antarcticus* and *Eudorella gracilior* are circumpolar species also recorded from Subantarctic Islands of the Scotia Arc. Three other species, *Diastylis anderssoni*, *Diastylis mawsoni*, *Leptostylis crassicauda* and *Vaunthompsonia laevifrons/inermis* show a similar distribution but have not been recorded in the Ross Sea. *Procampylaspis compressa* and *Campylaspis breviramis* show at the moment a more restricted distribution (Weddell Sea, Antarctic Peninsula and Bellingshausen Sea). Finally, three apparently undescribed species belonging to the genera *Cumella*, *Campylaspis* and *Paralamprops* are recorded for first time in this study.

Most of these species show a wide range of geographical distributions and have been recorded from nearly all High Antarctic waters. The absence of some species from the Ross Sea may be better explained by a low research effort in this area than by true differences in the cumacean assemblages. That the affinity between the Antarctic and Magellan cumacean fauna is very low was also supported by this study, where only one species distributed in both regions, *Campylaspis quadriplicata*, was collected. Such a low affinity may be explained by both environmental and behavioural reasons. Circumantarctic current affect faunal interchange between both areas. Moreover, cumaceans only occasionally move into the water column, and its early life stages are sheltered in a marsupium, therefore, there is little opportunity to disperse.

Table 1. Bathymetric, regional and near-bottom distribution of cumaceans collected during the BENTART-03 cruise in the Bellingshausen Sea and SW Antarctic Peninsula waters. TI, Thurston Island; PI, Peter I Island; BS, Bellingshausen Sea; AP, W Antarctic Peninsula; N₁, abundance in the 10-50 cm near-bottom layer; N₂, abundance in the 55-90 cm near-bottom layer; N₃, abundance in the 100-140 cm near-bottom layer; T, total suprabenthic sledge abundance; B, additional data from box-corer samples; (*), damaged specimens.

	Depth range [m]	Regional distr.				Near-bottom distr.				B
		TI	PI	BS	AP	N ₁	N ₂	N ₃	T	
<i>Cyclaspis gigas</i>	492-608			•		2	-	-	2	1
<i>Vaunthompsonia laevisfrons</i>	87-390	•	•		•	16	1	2	19	2
<i>Cumella australis</i>	87-363		•		•	21	-	1	22	-
<i>Cumella</i> sp. A	657				•	1	-	-	1	-
<i>Campylaspis breviramis</i>	492			•		1	-	-	1	-
<i>Campylaspis quadriplicata</i>	492			•		1	-	-	1	-
<i>Campylaspis</i> sp. A	363		•			3	-	-	3	-
<i>Procampylaspis compressa</i>	743	•				1	-	-	1	-
<i>Procampylaspis</i> spp.	492-743	•		•		6	1	-	7	-
<i>Leucon antarcticus</i>	1052				•	-	2	-	2	-
<i>Eudorella gracilior</i>	1052				•	3	8	2	13	-
<i>Diastylis mawsoni</i>	608-1480	•		•		1	-	-	1	1
<i>Diastylis andersoni</i>	107				•	-	-	-	-	1
<i>Leptostylis crassicauda</i>	540-1052			•		-	2	-	2	-
<i>Leptostylis</i> cf. <i>antipa</i>	498-743	•		•		6	-	-	6	-
<i>Diastylis</i> sp. (*)	540-1052			•	•	1	1	-	2	-
<i>Hemilamprops pellucidus</i>	492-608	•		•		2	1	-	3	-
<i>Paralamprops</i> sp. A	534-608	•		•		9	-	-	9	1
Cumacea indeter. (*)						4	-	1	5	-

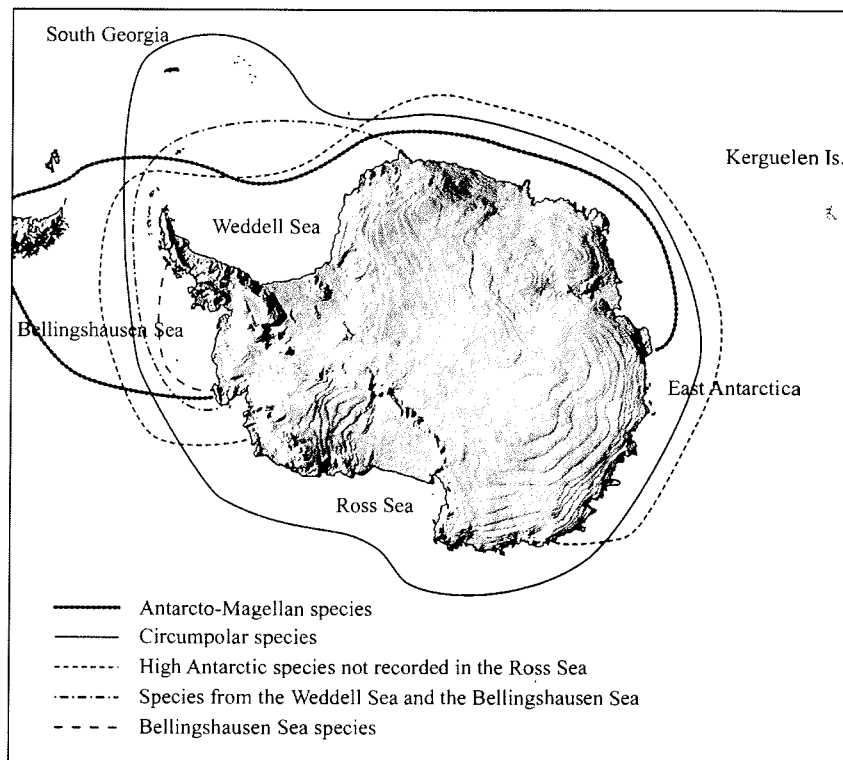


Fig. 1. Geographical distribution patterns of cumacean species collected in the Bellingshausen Sea during BENTART-03 cruise.

Shallow-water Asellota (Isopoda) from the Beagle Channel: an approach to diversity and faunistic affinities

Doti, B.¹, Roccatagliata, D.¹ & Zelaya, D.G.²

¹Facultad de Ciencias Exactas y Naturales, Buenos Aires, AR, bdoti@hotmail.com, rocca@bg.fcen.uba.ar

²Facultad de Cs. Naturales y Museo, La Plata, AR, dzelaya@museo.fcnym.unlp.edu.ar

The shallow-water Asellota from the Beagle Channel are poorly known, with only six species previously recorded. In order to increase our knowledge of the Asellota, four localities along the Beagle Channel were sampled between 2001-2002. The material studied was collected with a small dredge on Gable Island, Moat Mount, San Pío Cape and Sloggett Bay, at 30 m depth.