

RECENT OSTRACODS (FAMILY TRACHYLEBERIDIDAE) FROM THE SOUTHERN BRAZILIAN CONTINENTAL SHELF



MARIA INÊS FEIJÓ RAMOS¹, JOÃO CARLOS COIMBRA², CRISTIANINI TRESCASTRO BERGUE³ AND ROBIN CHARLES WHATLEY⁴

¹Coordenação de Ciências da Terra e Ecologia, Museu Paraense Emílio Goeldi, Av. Perimetral, 1901, Cx. P. 399, 66077-530, Belém, PA, Brazil. mramos@museu-goeldi.br

²Departamento de Paleontologia e Estratigrafia, UFRGS, Cx. P. 15001, 91501-970, Porto Alegre, RS, Brazil. joao.coimbra@ufrgs.br

³Laboratório de Micropaleontologia, Universidade do Vale do Rio dos Sinos, Av. Unisinos, 950, 93022-000, São Leopoldo, RS, Brazil. cbergue@unisinos.br

⁴Micropalaentology Unit, Department of Geology, University of Wales, Aberystwyth, SY23 3DB, United Kingdom. riw@aber.ac.uk

Abstract. The present study is a further contribution to the systematic knowledge of the ostracods from the southern Brazilian continental shelf. Twelve species of Trachyleberididae are recorded, including the following six new taxa: *Cativella ornelasae* sp. nov., *C. sudbrasiliensis* sp. nov., *Henryhowella inflata* sp. nov., *Henryhowella verrucosa* sp. nov., *Ambocythere venusta* sp. nov. and *Basslerites costata* sp. nov. The other six species have been recorded in previous studies, either in shallow or bathyal depths in both Brazilian waters and adjacent areas. Most species recorded herein are distributed in the neritic zone, except three, i.e., *Trachyleberis aorata*, *Ambocythere venusta* sp. nov. and *C. sudbrasiliensis* sp. nov. The first two species are eurybathic, while *C. sudbrasiliensis* sp. nov. is restricted to the inner shelf.

Key words. Ostracods. Recent. Trachyleberididae. Marine. Brazil.

Resumen. OSTRÁCODOS (FAMILIA TRACHYLEBERIDIDAE) RECIENTES DE LA PLATAFORMA CONTINENTAL DEL SUR DE BRASIL. El presente estudio es una contribución más al conocimiento de la sistemática de ostrácodos de la plataforma continental del sur de Brasil. Se registraron doce especies de Trachyleberididae, siendo seis de ellas nuevas: *Cativella ornelasae* sp. nov., *C. sudbrasiliensis* sp. nov., *Henryhowella inflata* sp. nov., *Henryhowella verrucosa* sp. nov., *Ambocythere venusta* sp. nov. y *Basslerites costata* sp. nov. Las demás especies ya habían sido registradas en otros estudios en aguas someras o batiales, no solo en el margen continental brasileño sino también en áreas adyacentes. La mayoría de las especies registradas se distribuye a lo largo de la zona nerítica, a excepción de tres: *Trachyleberis aorata*, *Ambocythere venusta* sp. nov. y *C. sudbrasiliensis* sp. nov. Las dos primeras parecen ser euribáticas, mientras *C. sudbrasiliensis* sp. nov. se limita a la plataforma interna.

Palabras clave. Ostrácodos. Reciente. Trachyleberididae. Marino. Brazil.

THIS study is part of a long-term project designed to describe the Ostracoda living on the southern Brazilian continental shelf. Taxonomic works dealing with certain genera from this region have been published before, but mainly within the last three decades. However, more comprehensive faunal studies were carried out by Ramos *et al.* (1999, 2004, 2009) on the Cytheruridae, Bairdiidae and Pontocyprididae, and Thaerocytheridae respectively.

This work deals exclusively with the taxonomy of the Trachyleberididae, including the description of six new species and the record of another six species previously described from the southern South Atlantic. The geographical, bathymetrical and stratigraphical distributions of each species are presented.

STUDY AREA

The study area comprises the southern Brazilian continental shelf (*sensu* Chaves, 1983) between Rio de Janeiro (21°S) and Rio Grande do Sul states (34°S). Sediments in

this area comprise a mixture of Recent and relict deposits, the product of modern hydrodynamical processes and glacio-eustatic variations during the Quaternary, especially due to the ~125 meter sea-level drop during the Last Glacial Maximum (LGM; 18,000–22,000 years BP) and the subsequent post-glacial to Holocene transgression. Terrigenous sedimentation is dominant, with only small carbonate areas on the outer shelf (Fig. 1).

The coastal and oceanic waters in this region are influenced by the Brazil Current, which flows southward, and also by sub-Antarctic water carried northward by the Falklands Current (Castro *et al.*, 2006). More detailed sedimentological descriptions can be found in Kowsmann and Costa (1979) and Corrêa *et al.* (1996); for physical oceanographic features of the study area see Ramos *et al.* (2004; 2009).

MATERIAL AND METHODS

This study is based on material, collected using Phil-

lips and van Veen grabs, during a series of cruises along the southern Brazilian continental shelf. The 500 samples studied came from legs 1, 2 and 3 of the Remac Project (coordinated by Petr leo Brasileiro S.A.-Petrobras), the Geomar VI (coordinated by the Diretoria de Hidrografia e Navega  o da Marinha do Brasil-DHN), and the Research Vessel *El Austral*. The samples of the Remac Project were collected between November 1972 and January 1973, while the Geomar VI cruise was carried out in March and April 1973. All samples recovered by the Research Vessel *El Austral* were collected in January 1967. More details of the sampled localities and of the samples themselves can be found in Fran a *et al.* (1983), Brasil (1978) and Martins *et al.* (1967), respectively.

The samples were provided as dried sediment and prepared according to standard methods for calcareous microfossils. Only 207 samples yielded ostracods. Specimens were illustrated using a Cambridge Stereoscan 120 SEM from the Department of Geology, University of Wales, Aberystwyth, UK. The type material is housed in the collections of the Museu de Paleontologia, Universidade Federal do Rio Grande do Sul, Section of Ostracoda, under catalogue numbers **MP-O-2154** to **MP-O-2197**.

Abbreviations. **H**, height; **L**, length; **W**, width; **C**, carapace; **V**, valve; **RV**, right valve; **LV**, left valve; **j**, juvenile; **MP-O**,

Ostracoda collection of Universidade Federal do Rio Grande do Sul, Brazil.

SYSTEMATIC PALEONTOLOGY

Subclass OSTRACODA Latreille, 1806

Order PODOCOPIDA Sars, 1866

Suborder PODOCOPINA Sars, 1866

Family TRACHYLEBERIDIDAE Sylvester-Bradley, 1948

Subfamily TRACHYLEBERIDINAE Sylvester-Bradley, 1948

Genus *Cativella* Coryell and Fields, 1937

Type species. *Cativella navis* Coryell and Fields, 1937.

Cativella ornellasae sp. nov.

Figures 2.1–6

1977. Costa sp.; Vivalvi *et al.*, p. 95, pl. 5, fig. 4.

Derivation of name. Named after Dr. Lilia Pinto de Ornellas, in recognition for her contribution to the study of Brazilian Ostracoda.

Type material. MP-O-2154 (holotype), female, LV, South Brazilian continental shelf, sample GVI-362, lat. 31 06'S, long. 49 46'W, 135 m water depth, biodetritic sand, Recent; MP-O-2155 (paratype), female, RV; MP-O-2156 (paratype), female, C; MP-O-2157, male, LV; MP-O-2158, male, LV.

Diagnosis. A species of *Cativella* with the median rib conspicuously interconnected. Dorsal rib large and keel-like; ventro-lateral rib carinate and sometimes perforated, with riblets extending dorsally from it. Anterior margin with a double row of strong spines ventrally. Surface reticulate.

Material. One hundred and twenty-seven V and 10 j.

Description. Large. Medium thickness. Subrectangular to subtrapezoidal in lateral view. Maximum height at anterior cardinal angle. Dorsal margin gently inclined towards the posterior region; largely obscured by the dorsal rib. Ventral margin slightly sinuous. Anterior margin broadly rounded with a feebly developed marginal rib which extends along the ventral margin and with a double row of strong spines ventrally, usually broken. Posterior margin with three or four small postero-dorsal and six strong postero-ventral spines; blunt apex just below mid-height. Surface reticulate and with three strongly developed longitudinal ribs. The keel-like dorsal one, usually partially broken, extends above the dorsal margin. The distinctly perforate median rib extends subhorizontally across the valve and the ventro-lateral rib is somewhat carinate and sometimes gently perforate; approximately six riblets extend dorsally from this. Eye tubercle rounded and well defined. In dorsal view, with subparallel

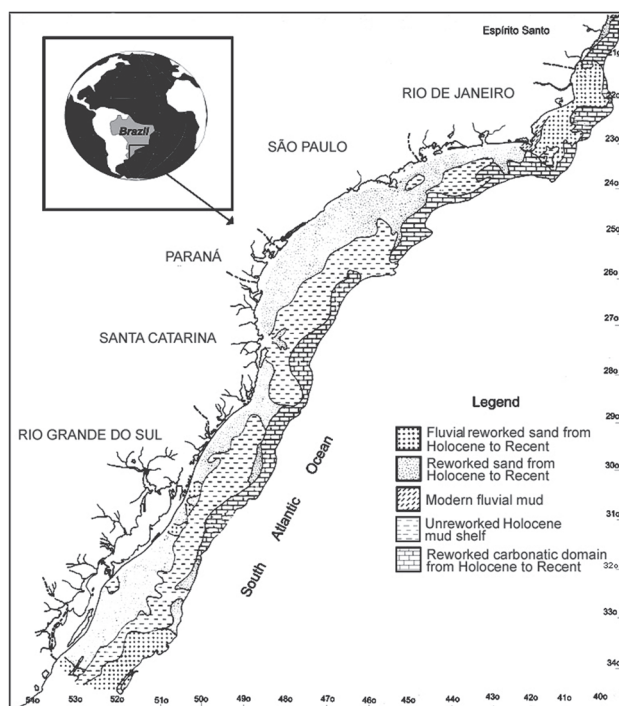


Figure 1. Location of the study area and distribution of bottom sediments (modified from Koswmann and Costa, 1979)/ *localizaci n del  rea de estudio y distribuci n de los sedimentos*.

sides and anterior margin strongly rimmed. Internal features typical of the genus. Sexual dimorphism present: males more elongate and narrower than females.

Dimensions (mm). MP-O-2154 (holotype), female, LV, L: 0.92; H: 0.58; MP-O-2155 (paratype), female RV, L: 0.90; H: 0.52; MP-O-2156 (paratype), female, C, RV, L: 0.90; H: 0.52; LV, L: 0.90; H: 0.56; MP-O-2157 (paratype), female, LV, L: 0.90; H: 0.56; MP-O-2158 (paratype), male LV, L: 0.94; H: 0.56.

Remarks. *Cativella ornellasae* sp. nov. is very similar to *C. bensoni* Neale, 1967, from Halley Bay, Antarctica. However, the new species has a thinner carapace, more delicate ribs, and a perforate median rib. *C. ornellasae* sp. nov. and *C. sudbrasiliensis* sp. nov. are also very similar, but the first differs from the second mainly by the absence of a conspicuous submarginal anterior rib, anterior margin with a double row of numerous strong spines, different reticulation pattern, and well developed riblets extend dorsally from the ventro-lateral rib. Finally, *C. ornellasae* is more subtrapezoidal in lateral view than *C. sudbrasiliensis*.

Distribution. This species is known in the Quaternary of São Paulo State (Vicalvi *et al.*, 1977). In the present study it occurs between 22°33.5' and 32°59'S, from 39 to 158 m depth, predominantly on sandy and silty sediments.

Cativella sudbrasiliensis sp. nov.

Figures 2.7–18

2003. *Cativella* sp.; Drozinski *et al.*, p. 68, fig. 8G.

2005. *Cativella* sp.; Machado *et al.*, p. 244, pl. 4, fig. 3.

Derivation of name. With reference to the type locality.

Diagnosis. A species of *Cativella* with delicate but conspicuous marginal anterior rib; median rib perforate; dorsal and ventro-lateral ribs imperforate. Surface reticulate with small tubercle on the angles of each of the fossae.

Type material. MP-O-2159 (holotype), female, LV, South Brazilian continental shelf, sample Leg 3-3227, lat. 24°46'S, long. 46°40'W, 46 m water depth, bioterritic sand, Recent; MP-O-2160 (paratype), male, LV; MP-O-2161 (paratype), female, C; MP-O-2162 (paratype), female, LV; MP-O-2163 (paratype), male, LV; MP-O-2164, male, RV; MP-O-2165 (paratype), male, RV; MP-O-2166 (paratype), male, LV; MP-O-2167 (paratype), male, C; MP-O-2168 (paratype), female, LV; MP-O-2169 (paratype), female, LV.

Material. Thirty-two V and 3 j.

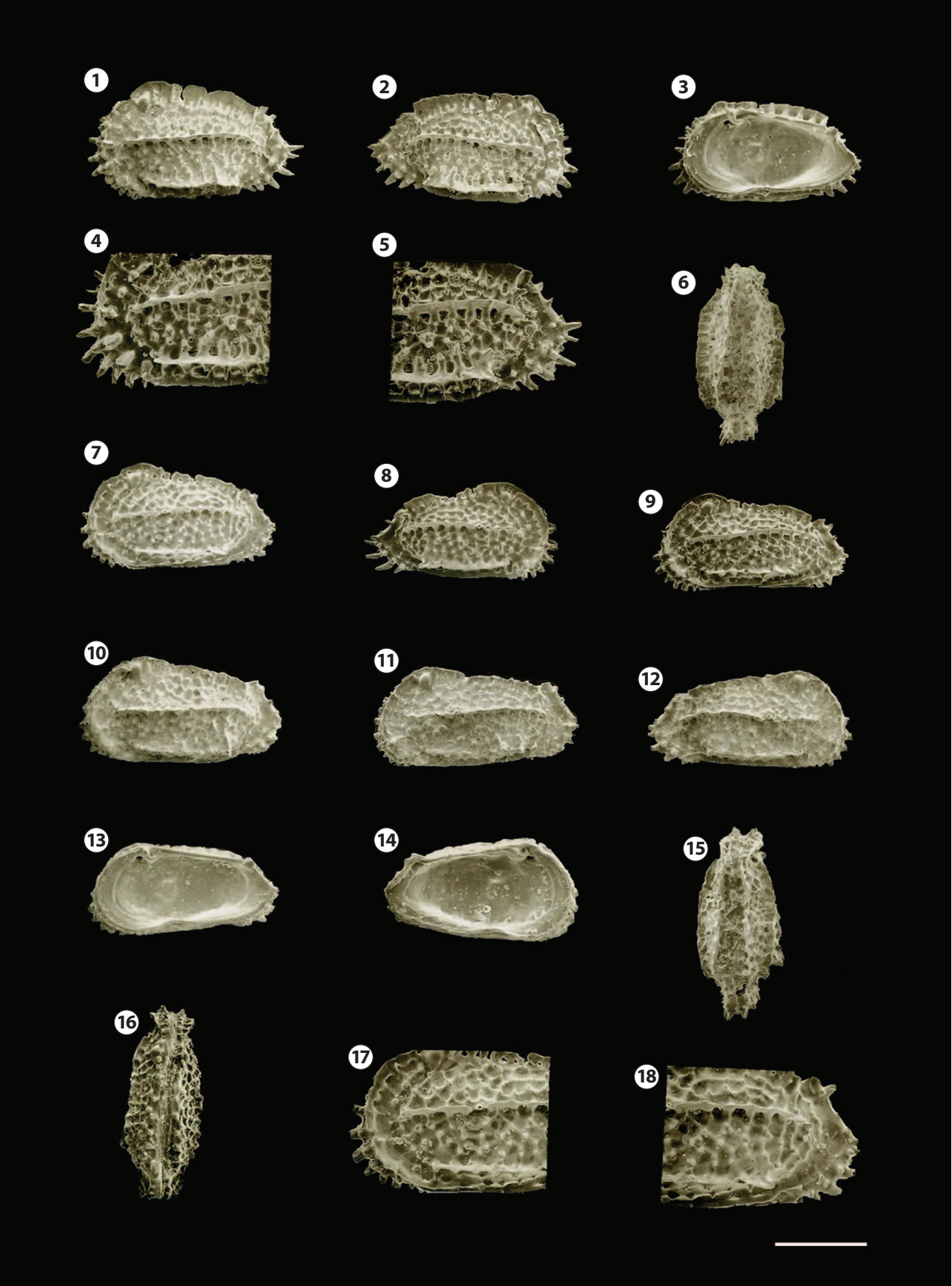
Description. Large. Medium thickness. Subrectangular elongate in lateral view. Maximum height at anterior cardinal angle. Dorsal margin straight and sloping towards the

posterior, largely obscured by the dorsal rib. Ventral margin slightly sinuous. Anterior margin rounded with delicate but conspicuous marginal rib which extends along the ventral margin and two large spines ventrally, both frequently partially broken. Posterior margin somewhat pointed with apex around mid-height and variable number of strong marginal spines mainly below that. Surface ornamented by costae and reticulae, with three distinct longitudinal ribs. The keel-like and imperforate dorsal rib extends above the dorsal margin and is frequently broken. Median rib perforate. Ventro-lateral rib imperforate and without dorsal riblets. Intercostal areas gently reticulate with small tubercle on the angles of each of the fossae. Eye tubercle rounded and very prominent. In dorsal view with subparallel sides and anterior margin strongly rimmed. Internal characters as for the genus. Sexual dimorphism present: males more elongate and narrower than females.

Dimensions (mm). MP-O-2159 (holotype), female, LV, L: 0.88; H: 0.51; MP-O-2160 (paratype), male, LV, L: 0.92; H: 0.48; MP-O-2161 (paratype), female, C, W, 0.42; RV, L: 0.94; H: 0.50; LV, L: 0.92; H: 0.50; MP-O-2162 (paratype), female, LV, L: 0.80; H: 0.44; MP-O-2163 (paratype), male, LV, L: 0.90; H: 0.50; MP-O-2164 (paratype), male, RV, L: 0.88; H: 0.44; MP-O-2165 (paratype), male, RV, L: 0.84; H: 0.44; MP-O-2166 (paratype), male, LV, L: 0.90; H: 0.46; MP-O-2167 (paratype), male, C, W: 0.34; RV, L: 0.86; H: 0.44; LV, L: 0.88; H: 0.42; MP-O-2168 (paratype), female, LV, L: 0.88; H: 0.52; MP-O-2169 (paratype), female, LV, L: 0.84; H: 0.50.

Remarks. For a comparison with *C. ornellasae* sp. nov., see the “Remarks” of the previous species. *C. sudbrasiliensis* sp. nov. is very similar to *Costa riograndensis* Sanguinetti, Ornellas, Coimbra and Ramos, 1992 described from the Pelotas Basin, southernmost Brazil, and recorded by Bertels and Martinez (1990) in the Quaternary of Buenos Aires Province, Argentina. The main differences between these two species are in the ornamentation. *C. riograndensis* possess a poorly defined subcentral tubercle, dorsal rib non keel-like and median rib as a row of discontinuous delicate protuberances. The fossil species also is smaller and less inflated than *C. sudbrasiliensis* sp. nov.

Distribution. In the present study *C. sudbrasiliensis* sp. nov. occurs between 22°33.5' and 31°52'S, mainly on the inner shelf, and is more abundant between 28 and 60 m water depth on fine sand or silt and possess only two, probably, allochthonous occurrences (102 m and 95 m water depth). Drozinski *et al.* (2003) studying ostracods from the outer



shelf and upper slope in the Rio Grande do Sul State, southernmost Brazil, identified some valves of this species at 100 and 160 m depth.

Genus *Henryhowella* Puri, 1957

Type species. *Cythere evax* Ulrich and Bassler, 1904.

Henryhowella macrocaticricosa Whatley, Mogueilevsky, Chadwick, Toy and Ramos, 1998

Figures 3.1–3

1998. *Henryhowella macrocaticricosa* Whatley et al., p. 110, pl. 5, figs. 18–22.

2003. *Henryhowella macrocaticricosa* Whatley et al.; Drozinski et al., p. 68, fig. 8H–I.

2005. *Henryhowella macrocaticricosa* Whatley et al.; Machado et al., p. 244, pl. 4, fig. 4.

Material. Six hundred and ten V, 69 C and 1079 j.

Dimensions (mm). MP-O-2170 (figured specimen), female RV, L: 0.60; H: 0.58; MP-O-2171 (figured specimen), male, LV, L: 0.58; H: 0.36.

Remarks. Jellinek and Swanson (2003) discussed the diversity of muscle scars, shape, and hinge composition of *Henryhowella* and proposed the possible existence of *Henryhowella*-like genera living in different regions and environments (shallow and deeper waters). In a tentative contribution to solve this problem they proposed the new genus *Apatihowella*, based on morphologic characteristics of carapace and soft part anatomy.

Although Jellinek and Swanson (2003) stated that *Apatihowella* is wider anteriorly, some species described by them, e.g., *A. (Fallacihowella) sol*, *A. (F.) caligo* and *A. (Apatihowella) rustica* exhibit the contrary. Other characteristics such as the hinge ears, hinge composition and the division of some adductor muscle scars are not constant at generic level. *Apatihowella (F.) caligo* Jellinek and Swanson and *Henryhowella parthenopea* Bonaduce, Barra and Aiello, 1999 (a species which they used

for comparison), for instance, have identical hinges (holamphidont). The diversity of carapace elements present in *Henryhowella* and *Apatihowella*, renders the boundary between them unclear, as can be inferred by the comparison of published figures of species of both genera, mainly in respect of their terminal and median hinge elements. Based on a detailed study of soft part anatomy, Jellinek and Swanson (2003) also supported their proposal on differences present in the antennal exopods, shape of copulatory apparatus and its ventral flaps. However, additional studies of this sort are required to determine if these patterns are consistent at generic level or constitute only specific characteristics.

The specimens recorded in this article do not fit strictly into either *Apatihowella* or *Henryhowella*. They differ from the two generic diagnoses by the absence of the posterior longitudinal ridges, their larger size, their muscle scars and their hinge morphology. The new data supplied herein demonstrates the necessity of a more comprehensive diagnosis for both *Henryhowella* and *Apatihowella* or, preferably, their lumping of them in a single genus. *Henryhowella macrocaticricosa* is similar to *Henryhowella inflata* sp. nov., but differs mainly in the better developed eye and subcentral tubercles, and more oblique dorsal margin.

Distribution. *Henryhowella macrocaticricosa* was found on the Argentinian and Brazilian shelves between 31°33.2'S and 52°15.8', from 22 to 150 m depth and in fine sandy silt. In this study it occurs between 23°04.5'S and 33°38', from 13 to 158 m depth and predominantly on silt.

Henryhowella heros (Whatley, Stauton, Kaesler and Mogueilevsky, 1996)

Figures 3.4–5

1996. *Echinocythereis heros* Whatley et al., p. 69, pl. 3, figs. 15–18, 20.

1997. *Henryhowella heros* (Whatley et al.); Whatley et al., p. 66, pl. 11, figs. 7–9.

Figure 2. 1–6, *Cativella ornellasae* sp. nov.; **1**, MP-2154 (holotype), female, carapace, left view; **2**, MP-2155 (paratype), female, carapace, right view; **3**, MP-2155 (paratype), female, carapace internal view; **4**, MP-2156 (paratype), female, left view, detail of the anterior region; **5**, MP-2156 (paratype), female, left valve, detail of the posterior region; **6**, MP-2156 (paratype), female, carapace, dorsal view; **7–18, *Cativella sudbrasiliensis* sp. nov.;** **7**, MP-2159 (holotype), female, carapace, left view; **8**, MP-2160 (paratype), female, carapace, right view 39.7X; **9**, MP-2161 (paratype), male, carapace, left view; **10**, MP-2162 (paratype), female, carapace, left view; **11**, MP-2163 (paratype), male, carapace, left view; **12**, MP-2164 (paratype), male, carapace, right view; **13**, MP-2164 (paratype), male, right valve, internal view; **14**, MP-2162 (paratype), female, left valve, internal view; **15**, MP-2165 (paratype), female, carapace, dorsal view; **16**, MP-2166 (paratype), male, carapace, dorsal view; **17**, MP-2159 (holotype), female, left valve, detail of the anterior region; **18**, MP-2159 (holotype), female, left valve, detail of the region posterior, 60X / **1–6, *Cativella ornellasae* sp. nov.;** **1**, MP-2154, holotipo, hembra, caparazón, vista izquierda; **2**, MP-2155, paratipo, hembra, caparazón, vista derecha; **3**, MP-2155, paratipo, hembra, caparazón, vista interna; **4**, MP-2156, paratipo, hembra, vista izquierda, detalle de la región anterior; **5**, MP-2156, paratipo, hembra, valva izquierda, detalle de la región posterior; **6**, MP-2156, paratipo, hembra, caparazón, vista dorsal; **7–18, *Cativella sudbrasiliensis* sp. nov.;** **7**, MP-2159, holotipo, hembra, caparazón, vista izquierda; **8**, MP-2160, paratipo, hembra, caparazón, vista derecha; **9**, MP-2161, paratipo, macho, caparazón, vista izquierda; **10**, MP-2162, paratipo, hembra, caparazón, vista izquierda; **11**, MP-2163, paratipo, macho, caparazón, vista izquierda; **12**, MP-2164, paratipo, macho, caparazón, vista derecha; **13**, MP-2164, paratipo, macho, valva derecha, vista interna; **14**, MP-2162, paratipo, hembra, valva izquierda, vista interna; **15**, MP-2165, paratipo, hembra, caparazón, vista dorsal; **16**, MP-2166, paratipo, macho, caparazón, vista dorsal; **17**, MP-2159, holotipo, hembra, valva izquierda, detalle de la región anterior; **18**, MP-2159, holotipo, hembra, valva izquierda, detalle de la región posterior. Scale/ escala= 0.5 mm.

1998. *Henryhowella heros* (Whatley *et al.*); Whatley *et al.*, p. 63, pl. 5, fig.16–17.

Material. Fifty seven V, 4 C and 253 j.

Dimensions (mm). MP-O-2172 (figured specimen), C, RV, L: 0.62; H: 0.58; LV, L: 0.60; H: 0.40; MP-O-2173 (figured specimen), RV, L: 0.60, H: 0.40.

Remarks. The specimens from the present study are identical to the type material. This species is very similar to *Henryhowella inflata* sp. nov. but has less spinose ornamentation, the eye tubercle more conspicuous and the posterior margin more rounded mainly in LV. It is also similar to *Rocaleberis* sp. Echevarría (1982), from the early Miocene of Argentina; however, it is smaller, more concave in the region immediately behind the eye tubercle and has the anterior region more pointed. *H. heros* was first recorded in Chilean waters by Whatley *et al.* (1996).

Distribution. *Henryhowella heros* has been recorded in the littoral and continental shelf in Argentina, from 36°15'05" to 52°19.2'S, and up to 200 m depth, predominantly in sandy sediments. In the present study it occurs from 23°08' to 32°47'S, in depths between 21.9 and 148 m, predominantly on silt.

Henryhowella inflata sp. nov.

Figures 3.6–12

Derivation of name. Referring to the inflated shape of carapace.

Type material. MP-O-2174 (holotype), female, C, South Brazilian continental shelf, sample GVI-330, lat. 32°41'S, long. 50°57'W, 65 m water depth, bioturbitic silty sand, Recent; MP-O-2175 (paratype), female, RV; MP-O-2176 (paratype), male, C; MP-O-2177 (paratype), female, C; MP-O-2178, male, C.

Material. Five hundred and sixty four V and 1409 j.

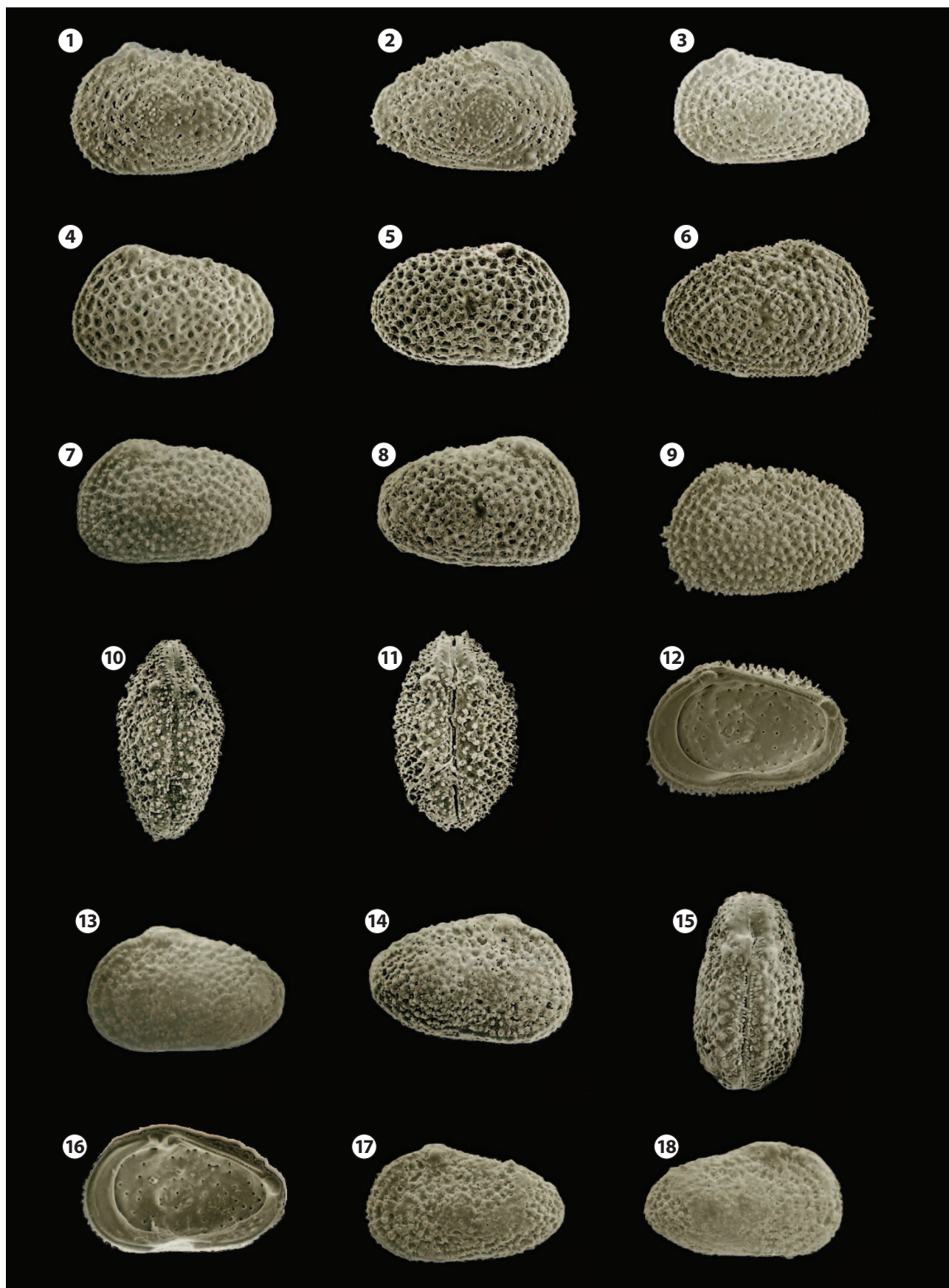
Diagnosis. Medium-sized carapace, subovate, inflated, with prominent eye tubercle. Ornamentation concentrically reticulate, with small, conical, sometimes bifurcate spines. Postero-dorsal margin rounded, extending slightly downward. Posterior cardinal angle more conspicuous in LV.

Description. Medium-sized and subovate carapace. Cardinal angles rounded; in LV the posterior is more marked. Dorsal margin almost straight and oblique. Ventral margin slightly convex, upturned in the posterior region. Anterior margin obliquely rounded. Posterior margin rounded in RV and almost straight in LV. Spines occur along the entire margin. Eye tubercle conspicuous. Surface primarily reticulate and secondarily covered with conical spines, sometimes bifurcate at the extremity. Normal pore-canals sieve-type. In dorsal view carapace ovate and inflated especially in females. Maximum width in the antero-median region. Internal view: hinge holamphidont. Anterior tooth wide and multilobate, followed by a small alveolus. Median sulcus locellate and wide. Posterior tooth wide and multilobate with a small median sulcus. Muscle scars as for the genus. Sexual dimorphism pronounced: males much less inflated than females.

Dimensions (mm). MP-O-2174 (holotype), female C, W: 0.40; RV, L: 0.64; H: 0.40; LV, L: 0.64; H: 0.40; MP-O-2175 (paratype), female RV, L: 0.56; H: 0.38; MP-O-2176, male C, W: 0.34; RV, L: 0.60; H: 0.40; LV, L: 0.62; H: 0.40; MP-O-2177 (paratype), female C, W: 0.36; RV, L: 0.60; H: 0.40; LV, L: 0.60; H: 0.36; MP-O-2178 (paratype), male C, W: 0.34; RV, L: 0.64; H: 0.38; LV: L: 0.64; H: 0.38.

Remarks. *Henryhowella inflata* sp. nov. is similar to *Henryhowella asperrima* (Reuss) var. *digitalis* Levinson, 1974 (Leroy and Levinson, 1974), differing in the conspicuous eye tubercle, dorsal margin more convex and posterior margin

Figure 3. 1–3, *Henryhowella macrocaticricosa* Whatley, Moguilevsky, Chadwick, Toy and Ramos, 1998; 1, MP-2170 (figured specimen), female, carapace, left view; 2, MP-1270 (figured specimen), female, carapace, right view; 3, MP-2171 (figured specimen), male, left valve, external view; 4–5, *Henryhowella heros* (Whatley, Stauton, Kaesler and Moguilevsky) Whatley, Moguilevsky, Toy, Chadwick and Ramos, 1997; 4, MP-2172 (figured specimen), female, carapace, left view; 5, MP-2173 (figured specimen), female, carapace, right view; 6–12, *Henryhowella inflata* sp. nov.; 6, MP-2174, (holotype), female, carapace, right view; 7, MP-2176 (paratype), male, carapace, left view; 8, MP-2176 (paratype), male, carapace, right view; 9, MP-2174 (holotype), female, carapace, left view; 10, MP-2177 (paratype), male, carapace, dorsal view; 11, MP-2178 (paratype), female, carapace, dorsal view; 12, MP-2174 (holotype), female, carapace, right valve, internal view; 13–18, *Henryhowella verrucosa* sp. nov.; 13, MP-2179 (holotype), female, carapace, left view; 14, MP-2179 (holotype), female, carapace, right view; 15, MP-2179 (holotype), female, carapace, right valve, dorsal view; 16, MP-2179 (paratype), female, carapace, right valve, internal view; 17, MP-2180 (paratype), male, carapace, left view; 18, MP-2180 (paratype), male, carapace, right view/ 1–3, *Henryhowella macrocaticricosa* Whatley, Moguilevsky, Chadwick, Toy y Ramos, 1998; 1, MP-2170, espécimen figurado, hembra, caparazón, vista izquierda; 2, MP-1270, homotipo, hembra, caparazón, vista derecha; 3, MP-2171, espécimen figurado, macho, valva izquierda; 4–5, *Henryhowella heros* (Whatley, Stauton, Kaesler y Moguilevsky) Whatley, Moguilevsky, Toy, Chadwick y Ramos, 1997; 4, MP-2172, homotipo, hembra, caparazón, vista izquierda; 5, MP-2173, homotipo, hembra, caparazón, vista derecha; 6–12, *Henryhowella inflata* sp. nov.; 6, MP-2174, holotipo, hembra, caparazón, vista derecha; 7, MP-2176, paratipo, macho, caparazón, vista izquierda; 8, MP-2176, paratipo, macho, caparazón, vista derecha; 9, MP-2174, holotipo, hembra, caparazón, vista izquierda; 10, MP-2177, paratipo, macho, caparazón, vista dorsal; 11, MP-2178, paratipo, hembra, caparazón, vista dorsal; 12, MP-2174, holotipo, hembra, caparazón, valva derecha, vista interna; 13–18, *Henryhowella verrucosa* sp. nov.; 13, MP-2179, holotipo, hembra, caparazón, vista izquierda; 14, MP-2179, holotipo, hembra, caparazón, vista derecha; 15, MP-2179, holotipo, hembra, caparazón, VD, vista dorsal; 16, MP-2179, paratipo, hembra, caparazón, valva derecha, vista interna; 17, MP-2180, paratipo, macho, caparazón, vista izquierda; 18, MP-2180, paratipo, macho, caparazón, vista derecha. Scale/escala=0.5mm.



less rounded. For a comparison with *H. heros* (Whatley *et al.*, 1996) see the “Remarks” of the previous species.

Distribution. *Henryhowella inflata* sp. nov. occurs from 22°42.5' to 33°38'S, between 25 and 158 m water depth, predominantly on silt.

***Henryhowella verrucosa* sp. nov.**

Figures 3.13–18

1977. *Trachyleberis* sp.; Vicalvi *et al.*, p. 95, pl.5, fig.1.

Derivation of name. *verruca* a wart. With reference to the verrucose or warty ornament of the species.

Type material. MP-O-2179 (holotype), female, C, South Brazilian continental shelf, sample Leg 1- 3076, lat. 30°76'S, long. 51°48' W, 58 m water depth, biotrititic mud, Recent; MP-O-2180 (paratype), male, C; MP-O-2181, male, jC.

Material. One hundred and thirteen V and 115 j.

Diagnosis. Carapace subovate to subrectangular, small for the genus. Surface verrucose. Marginal spines relatively small. Eye tubercle prominent.

Description. Carapace suboval to subrectangular, small for the genus. Posterior cardinal angle conspicuous. Anterior margin rounded. Posterior margin slightly rounded. Dorsal margin straight with three adjacent delicate spines in the postero-medial region. Ventral margin with discrete oral indentation, upturned in the posterior region. Small spines spread along the entire margin. Eye tubercle prominent. Surface verrucose. In dorsal view antero-medial region somewhat depressed. Maximum width posteriorly. Internal view: holamphidont hinge. Small sinuous anterior tooth followed by an alveolus and a slightly crenulate median sulcus. Posterior tooth large with a median sulcus. Central muscle scars composed by a V-shaped frontal scar and four adductor scars in a vertical row, the upper one U-shaped below which is a long, oblique scar above two smaller scars. Inner margin well developed anteriorly, with small vestibulum. Sexual dimorphism present: females smaller and more inflated in the posterior region, showing a delicate depression in the antero-medial region in dorsal view.

Dimensions (mm). MP-O-2179 (holotype), female C, RV, L: 0.50; H: 0.32; LV, L: 0.52; H: 0.32; MP-O-2180 (paratype), male C, W: 0.32; RV, L: 0.60; H: 0.32; LV, L: 0.58; H: 0.32; MP-O-2181 (paratype), male j C, RV, L: 0.50; H: 0.30; LV, L: 0.50; H: 0.30.

Remarks. *Henryhowella verrucosa* sp. nov. is similar to *Henryhowella dasyderma* (Brady, 1880) figured in Whatley and Coles (1987). It differs, however, in its more prominent eye tubercle, smaller size, surface with less spines and narrower anterior region.

Distribution. *Henryhowella verrucosa* sp. nov. was recorded by Vicalvi *et al.* in the Holocene on the continental shelf off São Paulo State. In the present study it occurs from 22°33.5' to 33°13'S, in the range depth of 36 to 148 m, predominantly on silt.

Genus *Trachyleberis* Brady, 1898

Type species. *Cythere scabrocuneata* Brady, 1880.

***Trachyleberis aorata* Bergue and Coimbra, 2008**

Figures 4.1–6

2003. *Trachyleberis* sp.; Drozinski *et al.*, p. 68, fig. 8J.

2005. *Trachyleberis* sp.; Machado *et al.*, p. 245, pl. 4, fig. 6.

2006. *Trachyleberis* sp.; Bergue *et al.*, p. 206, fig. 6L.

2008. *Trachyleberis aorata* Bergue and Coimbra, p. 122, pl. 4, figs. 8–11.

Material. Four hundred and three V and 1070 j.

Dimensions (mm). MP-O-2182 (figured specimen), female, C, RV, L: 0.90; H: 0.52; LV, L: 0.90; H: 0.52; MP-O-2183 (figured specimen), male, C, RV, L: 0.90; H: 0.50; LV, L: 0.94; H: 0.54.

Distribution. *T. aorata* was found in Recent sediments between 22°42.5' and 32°59'S, from 42 to 158 m depth, predominantly on silty sediments. Drozinski *et al.* (2003) recorded autochthonous specimens on the southernmost Brazilian slope (242 m, 414 m and 505 m depth). Bergue *et al.* (2006) and Bergue and Coimbra (2008) recorded this species on the upper slope of Santos Basin, southeast Brazilian slope, in the Pleistocene and Holocene.

Genus *Basslerites* Howe, 1935

Type species. *Basslerella miocenica* Howe, 1935.

***Basslerites multicostata* sp. nov.**

Figures 4.7–12

1977. *Basslerites* sp.; Vicalvi *et al.*, p. 94, pl. 4, fig. 4.

1982. *Cytherura* sp. A; Bertels *et al.*, p. 144, pl. 6, fig. 1a,b.

2005. *Basslerites* sp.; Machado *et al.*, p. 244, pl. 4, fig. 7.

Derivation of name. Referring to the numerous longitudinal ribs.

Type material. MP-O-2184 (holotype), female, C, South Brazilian continental shelf, sample GVI-349, lat. 31°24.5'S, long. 50°41'W, 60 m water depth, silty sediments, Recent; MP-O-2185 (paratype), female, C; MP-O-2186 (paratype), male, C.

Material. Thirty one V.

Diagnosis. Carapace medium size, elongate subovate in lat-

eral view. Posterior cardinal angle somewhat knoblike in LV. Surface ornament of numerous well-defined but weak longitudinal ribs and very delicate reticulation becoming more conspicuous at the posterior end. Anterior margin paralleled by two or three weak ribs, with faint reticulation between them. Eye tubercle absent.

Description. Shell medium thick. Carapace elongate subovate in lateral view. LV conspicuously larger than RV, overlapping RV along free margins and at the posterior cardinal angle, somewhat knoblike in LV. Maximum height at anterior cardinal angle. Dorsal and ventral margins almost straight and subparallel. Anterior margin broadly rounded. Posterior margin obliquely truncated below and obtuse above the middle. Surface ornamented with numerous well-defined but delicate longitudinal ribs and very faint reticulation, most conspicuous at the posterior end. Two or three weak ribs with barely perceptible reticulation between them parallel the anterior margin, extending through the ventral one. Eye tubercle absent. In dorsal view widest around one third of the length from the posterior end, sides convex, converging to both ends, anterior end less compressed than posterior. Inner lamella wide anteriorly; inner margin coincident with the line of concrescence; radial pore canals numerous, mostly simple and straight. Hinge holamphidont with median element finely crenulate. Central muscle scars typical of the genus. Sexual dimorphism very faint: males somewhat narrower than females.

Dimensions (mm). MP-O-2184 (holotype), female, C, W: 0.22; RV L: 0.50; H: 0.24; LV, L: 0.52; H: 0.26; MP-O-2185 (paratype), female, C, W: 0.22; RV, L: 0.52; H: 0.28; LV, L: 0.54; H: 0.30; MP-O-2186 (paratype), male C, W: 0.20; RV, L: 0.52; H: 0.26; LV, L: 0.54; H: 0.28.

Remarks. *Basslerites multicostata* sp. nov. differs from all other species of the genus known to the authors in the nature of its ornament of numerous weak longitudinal ribs and very slight reticulation. The Holocene specimens figured by Bertels *et al.* (1982) from the Chuí Formation, southernmost Brazil, are somewhat eroded and possess less evident ornamentation.

Distribution. This species occurs fossil in the Holocene of São Paulo and Rio Grande do Sul states, as recorded by Vicalvi *et al.* (1977) and Bertels *et al.* (1982), respectively. Machado *et al.* (2005) recorded some valves on the inner shelf off Cabo Frio, Rio de Janeiro State, around 22°55'/23°05'S. In the present paper *B. multicostata* sp. nov. occurs from 29°04.3' to 31°52'S and is well distributed from 40 to 60 m water depth, mainly on silty sand sediments, with only one register around 126 m water depth.

Subfamily BUNTONIINAE Apostolescu, 1961

Genus *Ambocythere* Bold, 1957

Type species. *Ambocythere keyi* Bold, 1957.

Ambocythere venusta sp. nov.

Figures 4.13–18

2003. *Ambocythere* sp.; Drozinski *et al.*, p. 68, fig. 8K.

2006. *Ambocythere* sp.; Bergue *et al.*, p. 206, fig. 6N.

2008. *Ambocythere* sp.; Bergue and Coimbra, p. 123, pl. 4, figs. 12,13.

Derivation of name. With reference to the beauty of ornamentation.

Type material. MP-O-2187 (holotype), female, C, South Brazilian continental shelf, sample Leg 1-3123, lat. 30°53'S, long. 49°36'W, 120 m water depth, silty biodetritic sediments, Recent; MP-O-2188 (paratype), female, C; MP-O-2189 (paratype), male, C; MP-O-2190 (paratype), male RV; MP-O-2191 (paratype), female LV; MP-O-2192 (paratype), male LV; MP-O-2193 (paratype), male C.

Material. Twenty-one V and 3 j.

Diagnosis. A species of *Ambocythere* with a surface ornament with three conspicuous longitudinal ribs and minor intercostal ones. Intercostal areas variably reticulate, more conspicuously posteriorly. Behind the well-defined antero-marginal rim there are three to five very delicate perpendicular ribs, sometimes inconspicuous. Faint vertical submedian sulcus present. Inner lamella with small anterior vestibulum; antero-marginal pore-canals few, numerous and branching; postero-marginal pore-canals simple and rare.

Description. Shell thick, medium size. Subrectangular in lateral view. Maximum height at anterior cardinal angle. Dorsal margin straight and slightly inclined towards the posterior end, with posterior region obscured by the dorsal rib. Ventral margin almost straight. Anterior margin evenly rounded with prominent marginal rim, which continues along part of the ventral margin. Posterior margin obliquely truncate with denticulate flange below. Ornamentation consists of three more evident longitudinal ribs with minor intercostal ones. Dorsal rib short and prominent; median rib with two branches joined posteriorly, anteriorly or both; ventro-lateral rib parallel to the ventral margin in the posterior part, diverging slightly from it anteriorly. Intercostal areas variably reticulate, most conspicuously posteriorly. Behind the well-defined antero-marginal rim there are three to five very delicate perpendicular ribs, sometimes inconspicuous. Submedian and faint vertical sulcus extends to near the central muscle scars area. A small but evident spine occurs around the middle of the posterior margin. In dorsal

view with almost parallel sides; greatest width posteriorly; ends compressed; anterior margin strongly rimmed. Internal view: inner lamella broad in the anterior end with small vestibulum. Hinge holamphidont and strongly developed. Marginal pore-canals, numerous and branching anteriorly. Postero-marginal pore-canals simple and very reduced in quantity. The other internal features typical for the genus. Sexual dimorphism present: males larger and more elongate than females.

Dimensions (mm). MP-O-2187 (holotype), female, C, RV, L: 0.48; H: 0.28; LV, L: 0.50; H: 0.28; MP-O-2188 (paratype), female, C, RV, L: 0.48; H: 0.28; LV, L: 0.50; H: 0.28; MP-O-2189 (paratype), male, C, RV, L: 0.52; H: 0.28; LV, L: 0.54; H: 0.30; MP-O-2190 (paratype), male, RV, L: 0.54; H: 0.28; MP-O-2191 (paratype), female, LV, L: 0.50; H: 0.32; MP-O-2192 (paratype), male, LV, L: 0.56; H: 0.30; MP-O-2193 (paratype), male, C, RV, L: 0.57; H: 0.32; LV, L: 0.58; H: 0.32.

Remarks. The present species bears some resemblance to *Ambocythere* sp. cf. *Ambocythere ramosa* (Bold) Whatley and Coles, 1987, from the Quaternary of the North Atlantic. It differs mainly in its stronger anteromarginal rim, in the course of its longitudinal ribs, and intercostal reticulation pattern.

Distribution. In the present study *Ambocythere venusta* sp. nov. is rare, occurring from 23°26' to 32°57'S and restricted to bathymetric boundaries between 98 and 148 m water depth, mainly in sandy silt. Drozinski *et al.* (2003) recorded autochthonous specimens on the southernmost Brazilian slope at 160 m depth. Bergue *et al.* (2006) and Bergue and Coimbra (2008) recorded fossil specimens from the Quaternary upper slope of the Santos Basin.

Subfamily CYTHERETTINAE Triebel, 1952

Genus *Cytheretta* Mueller, 1894

Type species. *Cytheretta rubra* Mueller, 1894.

Cytheretta aff. *C. punctata* Sanguinetti, 1979

Figures 4.19–20

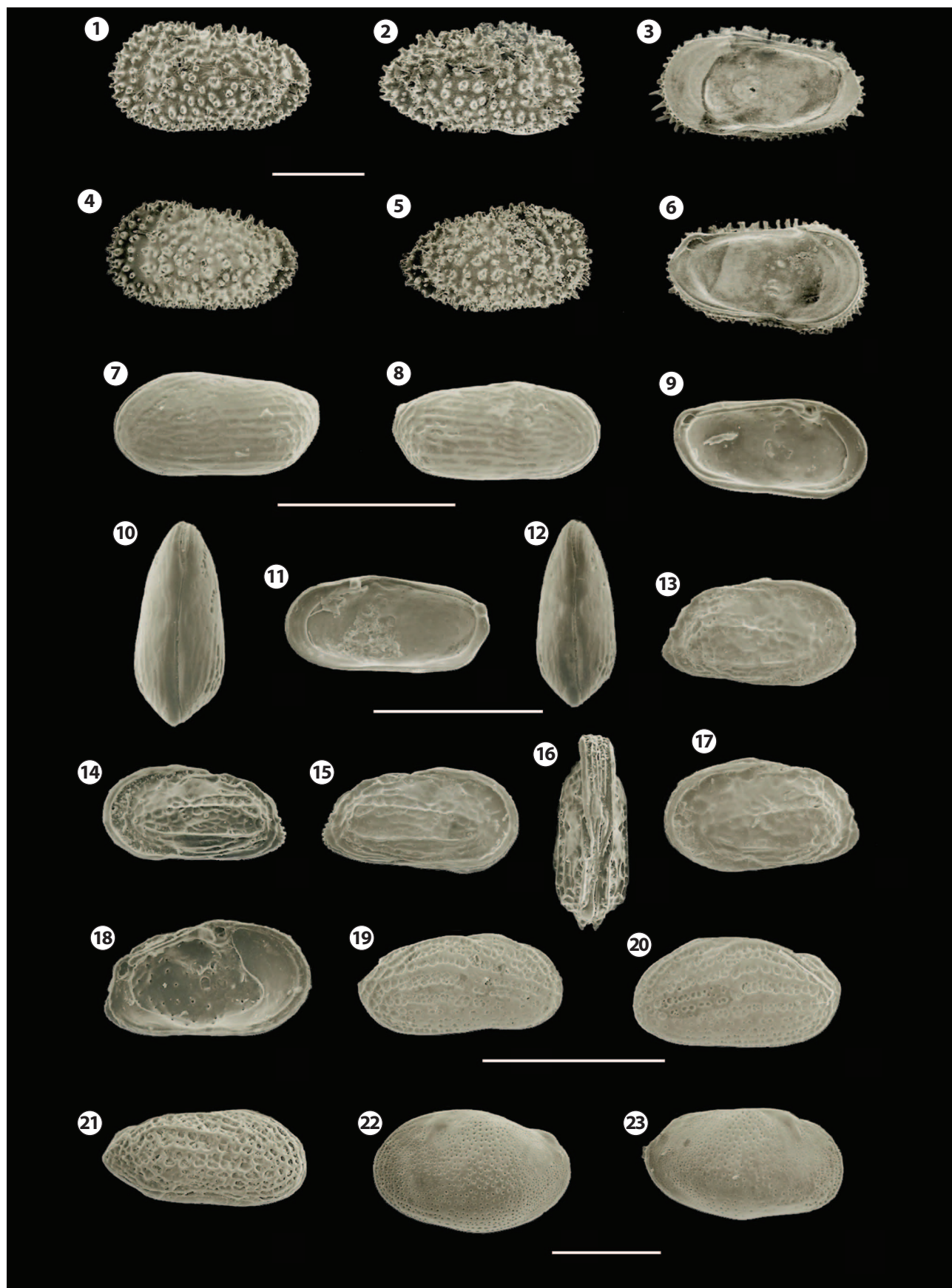
1977. *Cytheretta* sp.; Vivalvi *et al.*, p. 91, pl. 3, fig. 1.
1985. *Cytheretta punctata* Sanguinetti; Kotzian and Eilert, p. 84–85, 90–91, pl. 1, figs. 2,3.
1990. *Cytheretta punctata* Sanguinetti; Bertels and Martínez, p. 148–151, pl. 2, fig. 15.
1997. *Cytheretta punctata* Sanguinetti; Whatley *et al.*, p. 67, pl. 6, figs. 7–8.
1998. *Cytheretta punctata* Sanguinetti; Whatley *et al.*, p. 112, pl.2, figs. 4–6.
2005. *Cytheretta punctata* Sanguinetti; Machado *et al.*, p. 244, pl. 4, fig. 9.
2007. *Cytheretta punctata* Sanguinetti; Coimbra *et al.*, p. 276–277, tabs. I–II, fig. 3.

Material. Nine V, 12 C and 21 juveniles.

Dimensions (mm). MP-O-2194 (figured specimen), male C, RV, L: 0.60; H: 0.30; LV, L: 0.62; H: 0.33.

Remarks. This species is very similar to *Cytheretta punctata* Sanguinetti, 1979, although it is somewhat smaller and possesses more delicate ornamentation than the type material described from the Miocene of the Pelotas Basin, southernmost Brazil. For this reason, this species is just considered here *aff.* with the original *C. punctata*. In the synonymy are included all Quaternary and Recent occurrences attributed to *C. punctata*. In fact, all of them are constituted by material morphologically very similar to the specimens herein studied, probably belonging to the same species. Further detailed studies of the present species with more material to be analyzed will permit a better understanding of its true identity.

Figure 4. 1–6, *Trachyleberis aorata* Bergue and Coimbra, 2008; 1, MP-O-2182 (figured specimen), female, carapace, left view; 2, MP-O-2182 (figured specimen), female, right view; 3, MP-O-2183 (figured specimen), male, right valve, internal view; 4, MP-O-2183 (figured specimen), male, carapace, left view; 5, MP-O-2183 (figured specimen), male, right valve, internal view; 6, MP-O-2183 (figured specimen), male, left valve, internal view; 7–12, *Basslerites costata* sp. nov.; 7, MP-O-2184 (holotype), female, left view; 8, MP-O-2184 (holotype), female, right view; 9, MP-O-2184 (holotype), female, left valve, internal view; 10, MP-O-2185 (paratype), female, carapace, dorsal view; 11, MP-O-2184 (holotype), female, right valve, internal view; 12, MP-O-2186 (paratype), male, carapace, dorsal view; 13–18, *Ambocythere venusta* sp. nov.; 13, MP-O-2187 (holotype), female, carapace, right view; 14, MP-O-2188 (paratype), male, carapace, left view; 15, MP-O-2188 (paratype), male, carapace, right view; 16, MP-O-2189 (paratype), male, carapace, dorsal view; 17, MP-O-2187 (holotype), female, carapace, left view; 18, MP-2187 (holotype), female, left valve, internal view; 19–20, *Cytheretta* aff. *C. punctata* Sanguinetti, 1979; 19, MP-O-2194 (figured specimen), male, carapace, right view; 20, MP-O-2194 (figured specimen), male, carapace, left view; 21, *Protocytheretta multicostata* Whatley, Moguilevsky, Toy, Chadwick and Ramos, 1997; 21, MP-O-2195 (figured specimen), carapace, right view; 22–23, *Argenticytheretta laevipunctata* Sanguinetti, Ornellas and Coimbra, 1991; 22, MP-O-2196 (figured specimen), female, carapace, left view; 23, MP-O-2196 (figured specimen), female, carapace, right view; 1–6, *Trachyleberis aorata* Bergue and Coimbra, 2008; 1, MP-O-2182, espécimen figurado, hembra, caparazón, vista izquierda; 2, MP-O-2182, espécimen figurado, hembra, vista derecha; 3, MP-O-2183, espécimen figurado, macho, valva derecha, vista interna; 4, MP-O-2183, espécimen figurado, macho, caparazón, vista izquierda; 5, MP-O-2183, espécimen figurado, macho, vista derecha; 6, MP-O-2183, espécimen figurado, macho, valva izquierda, vista interna; 7–12, *Basslerites costata* sp. nov.; 7, MP-O-2184, holotipo, hembra, vista izquierda; 8, MP-O-2184, paratipo, hembra, vista derecha; 9, MP-O-2184, holotipo, hembra, valva izquierda, vista interna; 10, MP-O-2185, paratipo, macho, caparazón, vista dorsal; 11, MP-O-2184, holotipo, hembra, valva derecha, vista interna; 12, MP-O-2186, paratipo, macho, caparazón, vista dorsal; 13–18, *Ambocythere venusta* sp. nov.; 13, MP-O-2187, holotipo, hembra, caparazón, vista derecha; 14, MP-O-2188, paratipo, macho, caparazón, vista izquierda; 15, MP-O-2188, paratipo, macho, caparazón, vista derecha; 16, MP-O-2189, paratipo, macho, caparazón, vista dorsal; 17, MP-O-2187, holotipo, hembra, caparazón, vista izquierda; 18, MP-2187, holotipo, hembra, valva izquierda, vista interna; 19–20, *Cytheretta* aff. *C. punctata* Sanguinetti, 1979; 19, MP-O-2194, espécimen figurado, macho, caparazón, vista derecha; 20, MP-O-2194, espécimen figurado, macho, caparazón, vista izquierda; 21, *Protocytheretta multicostata* Whatley, Moguilevsky, Toy, Chadwick and Ramos, 1997; 21, MP-O-2195, espécimen figurado, caparazón, vista derecha; 22–23, *Argenticytheretta laevipunctata* Sanguinetti, Ornellas and Coimbra, 1991; 22, MP-O-2196, espécimen figurado, hembra, caparazón, vista izquierda; 23, MP-O-2196, espécimen figurado, hembra, caparazón, vista derecha. Scale/ escala= 0.5mm.



Distribution. Kotzian and Eilert (1985) recorded Quaternary material from inner shelf facies of the same basin very similar to the species mentioned here. Vicalvi *et al.* (1977) and Bertels and Martínez (1990) found *C. aff. C. punctata* in Holocene cores from São Paulo State and Bahía Blanca (Argentina), respectively. In Recent sediments, *C. aff. C. punctata* was recorded by Machado *et al.* (2005) on the inner shelf off Cabo Frio, Rio de Janeiro State, around 22°55'/23°05'S. Whatley *et al.* (1997, 1998) found it along the Argentinean shelf, from 36°05'S to 51°09.6'S, between the littoral and 146 m depth. In the present paper, *C. aff. C. punctata* occurs on the southern Brazilian shelf, between 23°08' and 33°31'S, from 15.8 and 44 m water depths, predominantly in sandy sediments, with just two supposed allochthonous occurrences (131 and 135 m water depth).

Genus *Protocytheretta* Puri, 1958

Type species. *Cythere daniana* Brady, 1869.

Protocytheretta multicostata Whatley, Moguelevsky, Toy, Chadwick and Ramos, 1997

Figure 4.21

1975. *Protocytheretta* sp. nov.; Bertels, p. 334, pl. 5, fig. 11.
 1977. *Protocytheretta* sp.; Vicalvi *et al.*, p. 91, pl. 3, fig. 2.
 1990. *Protocytheretta* sp. nov.; Bertels and Martínez, p. 140, pl. 2, fig. 16.
 1991. *Protocytheretta* sp.; Sanguinetti *et al.*, p. 142, pl. 2, fig. 5.
 1997. *Protocytheretta* sp.; Carreño *et al.*, p. 37, fig. 2: 11.
 1997. *Protocytheretta multicostata* Whatley *et al.*, p. 68, pl. 2, figs. 9–11.
 1998. *Protocytheretta multicostata* Whatley *et al.*, p. 112, pl. 6, figs. 9–10.
 1999. *Protocytheretta* sp.; Carreño *et al.*, p. 122, pl. 1, fig. 11.
 2005. *Protocytheretta multicostata* Whatley *et al.*; Machado *et al.*, p. 245, pl. 4, fig. 10.

Material. Eight V, 4 C and 6 j.

Dimensions (mm). MP-O-2195 (figured specimen), C, RV, L: 0.48; H: 0.22; LV, L: 0.48; H: 0.24.

Remarks. The material described by Whatley *et al.* (1998) from Argentina is somewhat larger than the Brazilian specimens.

Distribution. Carreño *et al.* (1997, 1999) recorded this species in the Pleistocene from the Pelotas Basin, southernmost Brazil. Bertels (1975), Bertels and Martínez (1990) and Vicalvi *et al.* (1977) found Holocene fossil specimens in Buenos Aires Province (Argentina) and São Paulo State (Brazil), respectively. Whatley *et al.* (1997, 1998) registered this species along the Argentinean and southernmost Brazilian shelves, from 30°02'9"S to 53°56'S. Machado *et al.* (2005) recorded it on the inner shelf off Cabo Frio, Rio de Janeiro State, around 22°55'/23°05'S. *Protocytheretta multicostata*,

a rare species in the sampled area, occurs mainly between 29°04'3"S and 33°25'S and between 18.6 and 65 m water depth, predominantly on sandy sediments, with just two allochthonous occurrences (126 and 135 m water depth).

Genus *Argenticytheretta* Rossi de García, 1969

Type species. *Argenticytheretta miocenica* Rossi de García, 1969.

Argenticytheretta laevipunctata Sanguinetti, Ornellas and Coimbra, 1991

Figures 4.22–23

1982. *Bensonina* sp. aff. *B. minipunctata* Sanguinetti, 1979; Bertels *et al.*, p. 140, pl. 6, figs. 2a–d.
 1985. *Bensonina* sp.; Kotzian and Eilert, p. 90, pl. 1, fig. 4.
 1991. *Argenticytheretta laevipunctata* [sic] Sanguinetti *et al.*, p. 139, pl. 1, figs. 1–10.
 1997. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Carreño *et al.*, p. 37, fig. 2: 9.
 1999. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Carreño *et al.*, p. 122, pl. 1, fig. 9.
 1997. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Whatley *et al.*, p. 67, pl. 2, figs. 2, 3.
 1998. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Whatley *et al.*, p. 112, pl. 6, fig. 4.
 2003. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Drozinski *et al.*, p. 68, fig. 8L.
 2005. *Argenticytheretta laevipunctata* Sanguinetti *et al.*; Machado *et al.*, p. 244, pl. 4, figs. 11, 12.

Material. One hundred and ninety-two V, 40 C and 428 j.

Dimensions (mm). MP-O-2196 (figured specimen), female, LV, L: 0.82; H: 0.54; MP-O-2197 (figured specimen), female, RV, L: 0.86; H: 0.48.

Distribution. Sanguinetti *et al.* (1991) and Carreño *et al.* (1997, 1999) recorded *A. laevipunctata* in Pleistocene sediments from the Pelotas Basin, southernmost Brazil. Bertels *et al.* (1982) and Kotzian and Eilert (1985) recorded Quaternary material from the same basin. Whatley *et al.* (1997, 1998) recorded *A. laevipunctata* between 38°54.5' S and 52°15.8'S, from the littoral to 150 m depth, on fine/medium sand and silt. Drozinski *et al.* (2003) studying ostracods from the outer shelf and upper slope in Rio Grande do Sul State, southernmost Brazil, identified some valves of this species at 160 m depth. According to Machado *et al.* (2005) it occurs on the inner shelf off Cabo Frio, Rio de Janeiro State, around 22°55'–23°05'S. In the present paper, this species occurs on the southern Brazilian shelf, between 22°23.5' S and 35°06.1'S, from 21.9 to 135 m depth, predominantly on silt.

CONCLUSIONS

The study of the Recent ostracods of the family Trachyleberididae from the southern Brazilian Continental Shelf

yielded twelve species including six new taxa: *Cativella ornelasae*, *C. sudbrasilensis*, *Henryhowella inflata*, *H. verrucosa*, *Ambocythere venusta* and *Basslerites costata*. The other six species (*H. heros*, *H. macrocaticricosa*, *Protocytheretta multicos-tata*, *Argenticytheretta laevipunctata*, *Trachyleberis aorata* and *Cytheretta* aff. *C. punctata*) have already been recorded in previous studies either in shallow or bathyal depths not only in Brazilian waters but also in adjacent areas. Most species registered herein are distributed along the neritic zone, except three: *T. aorata*, *A. venusta* sp. nov. and *C. sudbrasilensis* sp. nov. The first two seem to be eurybathic, while *C. sudbrasilensis* sp. nov. is restricted to the inner shelf. Five species (*C. ornellase* sp. nov., *H. verrucosa*, *T. aorata* and *P. multicos-tata*) have fossil record for the Pleistocene and Quaternary of South Atlantic. *Cytheretta* aff. *C. punctata* is probably different species of *Cytheretta punctata* Sanguinetti, 1979 from Miocene Pelotas basin, being more similar to the species recognized as *C. punctata* of younger record from Quaternary to Recent of Argentina and Brazil.

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