

Review article

The Subfamily Cytheropterinae Hanai, 1957 (Subphylum Crustacea, Class Ostracoda) from the Southern Brazilian Continental Shelf

La Sous-famille Cytheropterinae Hanai, 1957 (Subphylum Crustacea, Classe Ostracoda) du Plateau Continental Sud du Brésil

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Abstract

The study of the subfamily Cytheropterinae from the southern Brazilian continental shelf reveals the presence of four genera and nine species, including two newly described (*Cytheropteron sudatlanticum* sp. nov., *Loxoreticulatum pulchrum* sp. nov.) and two left in open nomenclature (*Cytheropteron* sp. and *Kangarina* sp.). All of these species are restricted to the southern part of the Southwest Atlantic Ocean and do not extend beyond the coast of Rio de Janeiro, Brazil. Three of these species (*Oculocytheropteron micropunctatum*, *O. reticulatum*, *O. macropunctatum*) extend beyond the southern limit of the Brazilian Province (36°S), while the others occur inside the limits of the Brazilian Province (36°S–22/21°S). The genus *Loxoreticulatum*, a well-known ostracod taxon from the Antarctic Peninsula, southern Argentina and Falkland (= Malvinas) Islands, is herein reported for the first time from offshore Brazil.

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Keywords: Marine Ostracods; Cytheropterinae; Southwestern Atlantic; Brazil

Résumé

L'étude de la Sous-Famille Cytheropterinae à partir des échantillons sédimentaires de surface issus du plateau continental meridional du Brésil révèle la présence de quatre genres et de neuf espèces dont deux sont décrites pour la première fois (*Cytheropteron sudatlanticum* sp. nov., *Loxoreticulatum pulchrum* sp. nov.) et deux autres sont laissées en nomenclature ouverte (*Cytheropteron* sp. et *Kangarina* sp.). Toutes ces espèces sont limitées à la partie sud de l'Océan Atlantique Sud-occidental. Trois de ces espèces (*Oculocytheropteron micropunctatum*, *O. reticulatum*, *O. macropunctatum*) se répartissent au delà de la limite méridionale de la province brésilienne (36°S), alors que les autres ne sont présentes qu'à l'intérieur des limites de cette province (36°S–22/21°S). Le genre *Loxoreticulatum*, un ostracodes bien connu de la Péninsule Antarctique, au sud de l'Argentine et aux Îles Falkland (= Malvinas) est enregistré pour la première fois au Brésil.

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Mots clés : Ostracodes marins ; Cytheropterinae ; Atlantique sudoccidental ; Brésil

1. Introduction

The family Cytheruridae G. W. Mueller, 1894 is one of the most diverse extant families of ostracods with a fossil record extending back to the Early Mesozoic or possibly to the latest Permian. Today, this family is almost exclusively marine, although some of its species inhabit marginal environments.

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During the Cenozoic, the cytherurids were almost equally diverse in both shallow and deep waters, whereas Mesozoic species seem to have been confined to the shelf, with some of them also living in estuaries and lagoons (Whatley and Boomer, 2000).

This family comprises very small species, which may explain why they are under-represented in most published faunal lists, mainly of deep-sea ostracods (Ayress et al., 1995). It is well represented in the southwestern Atlantic Ocean; off southern Brazil; it comprises a number of genera that are distributed among the subfamilies Cytheropterinae, Cytherurinae, Eucytherurinae and Paracytherideinae. The assignment of some genera within subfamilies is still controversial, but this is beyond the scope of this work.

The well-known subfamily Cytheropterinae is herein represented by the genera *Cytheropteron* Sars, 1866, *Occulocytheropteron* Bate, 1972, *Loxoreticulatum* Benson, 1964 and *Kangarina* Coryell and Fields, 1937. *Cytheropteron* is a cosmopolitan genus with many shallow and deep-water species. *Occulocytheropteron* was originally erected to include cytheropterine forms with well-developed eye tubercles and

to accommodate the Santonian species *O. praenuntatum* from Western Australia (Mazzini, 2004). *Loxoreticulatum* Benson, 1964 was first recorded off Antarctica and possesses few species, being a genus restricted to the Southwestern Atlantic Ocean, Falkland Islands and Argentina (Whatley et al., 1988). *Kangarina* is a worldwide genus represented by shallow-water species, whose populations are generally small (Medeiros and Coimbra, 1989).

Ostracod studies from surface sediments are of great significance for improved understanding of the biogeographic distribution of Recent ostracods (e.g. Brandão, 2013). A specific study on cytherurids from the Southwestern Atlantic was carried out by Whatley et al. (1988) who described 34 species belonging to eight genera from samples collected from the Antarctic Peninsula, sub-Antarctic, Falkland (= Malvinas) Islands, Tierra del Fuego, the Magellan Straits and few samples from Uruguay and Rio Grande do Sul State (southernmost Brazil). In Brazil, Ramos et al. (1999) and Coimbra et al. (1999) have studied the taxonomy and ecology of cytherurids from the northern coast of Rio de Janeiro State and from the Equatorial shelf, respectively.

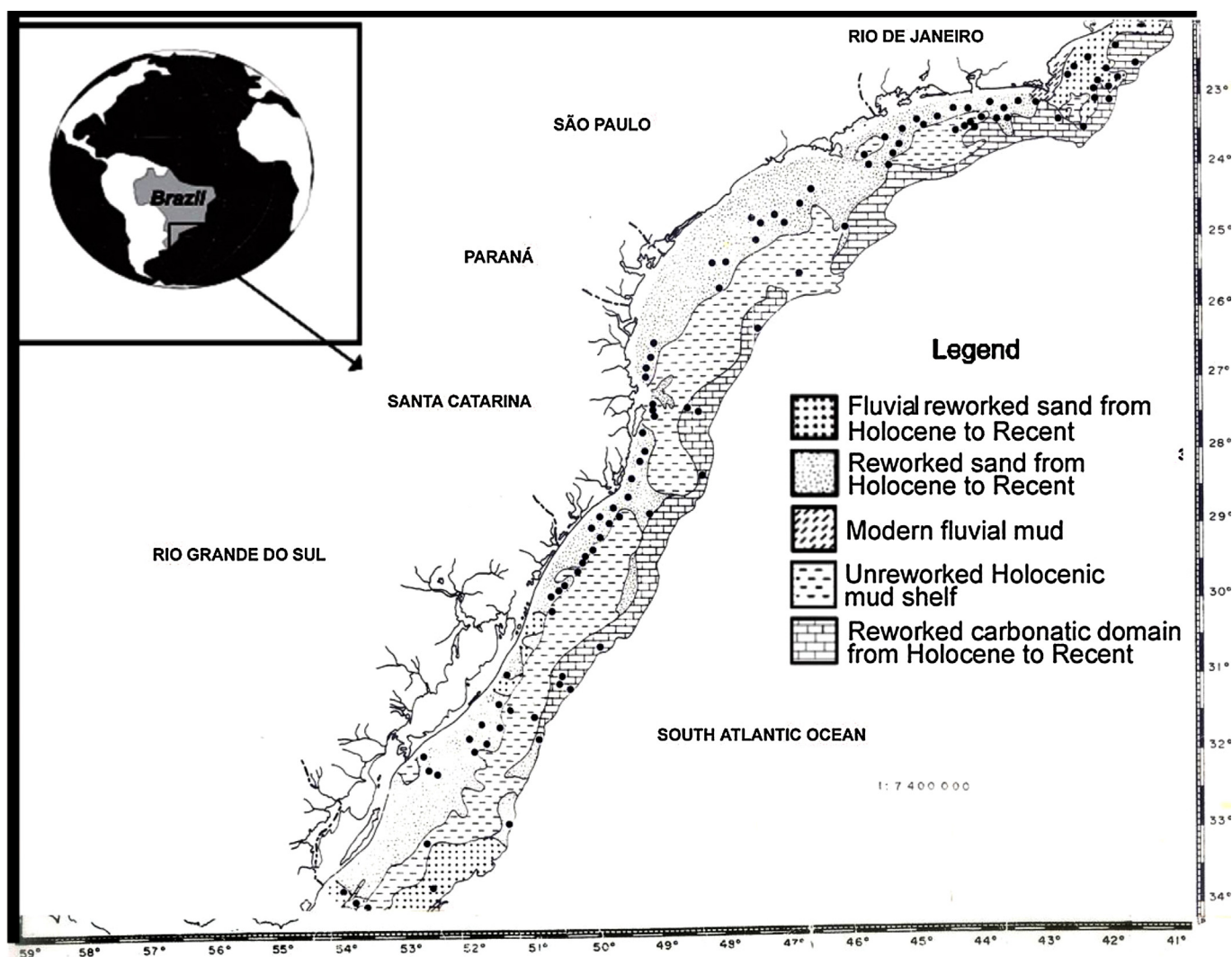


Fig. 1. Sedimentary facies distribution along the continental shelf of southern Brazil (modified from Kowmann and Costa, 1979) and distribution of studied samples.

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