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RESUMOS & PROGRAMAÇÃO

de 52 m.a.) do que estimativas prévias que postularam uma origem para o grupo entre 15-23 milhões de anos atrás.

PRELIMINARY RESULTS ON THE TAPHONOMY OF A NUCULID BIVALVE CONCENTRATION FROM THE CAPE MELVILLE FORMATION (EARLY TERTIARY), KING GEORGE ISLAND, ANTARCTICA

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Bivalves are an important and yet poorly studied component of the invertebrate fauna of the Early Tertiary Cape Melville Formation, cropping out at Cape Melville, northern King George Island. This stratigraphic unit consists of about 200m of shales and silty shales with subordinate intercalation of siltstone and fine-grained sandstone of glacial-marine facies. Invertebrate taxons represented in the rich and diversified fauna of the Cape Melville Formation include mollusks, brachiopods, crustaceans, solitary corals, echinoderms and bryozoans. We present herein the results of a qualitative and quantitative analysis of a bivalve concentration obtained from the lower part of a section denominated Hard Ground (HGS), exposed on the upper plateau area of the Melville peninsula. The HGS (11 meters thick) comprises several 3 –4 meters cycles of massive sandy-silty mudstone with abundant dropstones and thin (3-4 cm) calcareous bioturbated sandstone. The fossiliferous bed (50 cm thick) consists of a relatively continuous dark gray to black, fine to very fine sandstone that transitionally overlies afossiliferous similar sandstone. Bioclasts occur mostly dispersed in the sandstone and rarely weakly packed. Other taxa present are gastropods, solitary corals and crabs. Data on biofabric and taphonomic signatures as orientation, articulation, fragmentation, and shell dimensions, were taken for nearly two hundred specimens. The concentration is polytypical and made up of species of nuculoid bivalves (70%, n=139). The nuculid bioclasts show no preferred orientation, and are almost equally represented by specimens with the commissure plane vertical, oblique or horizontal in relation to the bedding plane. Nearly 95% of nuculid shells were found with closed articulated valves. Signs of abrasion, bioerosion and dissolution are absent. Pyritized specimens are common. Rare clusters of fragmented specimens were found. If we consider the life position of nuculid bivalves as with dorsal margin upward and commissure plane oriented vertically to the bedding plane, the random three-dimensional arrangement of bioclasts may be indicative of a reoriented assemblage. Taphonomic signatures as low disarticulation, absence of signs of abrasion and bioerosion, point out to short or no rework of nuculid shells and no exposition in the substrate before burial. Bioturbation may be an explanation for the randomic three-dimensional arrangement due the life mode of nuculid as a mobile detritus-feeding component of the infauna. A tube filled with fragmented shells, interpreted as resulting from activity of homolodromiid crabs, may be accountable additional bioturbation. Extant nuculid bivalves are rarely found living obliquely and even with dorsal margin directed downward, opening the possibility for interpreting the concentration as including all specimens *in situ*. Taphonomic features of the associated fauna, that includes numerous randomly oriented solitary corals, are also indicative of a reoriented or even of introduction of allochtonous constituents in the assemblage.

CARACTERIZAÇÃO TAFONÔMICA DE RESTOS QUATERNÁRIOS DE ANURA, ABISMO PONTA DE FLECHA, IPORANGA, SP

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O Abismo Ponta de Flecha, uma gruta vertical complexa desenvolvida em metacalcários proterozóicos de baixo grau metamórfico, no Município de Iporanga, Vale do Ribeira, região sul do estado de São Paulo, possui considerável material osteológico de idade quaternária, incluindo restos fósseis e recentes de Anura. Coletado de diversas galerias (jazidas) e identificado por uma equipe de geólogos e biólogos nos