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Rocks and the Rise of Ordovician Life

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Book of Abstracts



exhaustive search for brachiopods is needed in order to confirm the occurrence of the widespread deep-water *Foliomena* Fauna in South America.

THE EARLIEST STYLOPHORANS (ECHINODERMATA) FROM SOUTH AMERICA: NEW CORNUTES FROM THE EARLY TREMADOCIAN (LOWER ORDOVICIAN) OF JUJUY PROVINCE, ARGENTINA

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Stylophorans are a class of Palaeozoic echinoderms (Miaolingian–Bashkirian) characterized by the possession of a single feeding appendage (aulacophore) and a flattened, asymmetrical body (theca). Along with eocrinoids, glyptocystitid rhombiferans, and solutans, stylophorans were a major component of the low diversity cosmopolitan echinoderm assemblages spanning the Furongian–mid Tremadocian interval, before the diversification of crinoids. In northwestern Argentina (eastern Cordillera of Jujuy Province, Angosto del Moreno locality), the Pupusa Formation (Upper Member of the Guayoc Chico Group) reflects deposition in an offshore environment ending in a shoreface environment. The Pupusa Formation yielded a remarkably well-preserved assemblage of early Tremadocian (Tr1) echinoderms comprising eocrinoids and cornute stylophorans, found at the base of storm-induced sandstone beds in offshore settings. The cornute can be assigned to the scotiaecystid genus *Thoralicystis*, which is also present in the Lower Ordovician of the Montagne Noire (France) and the Anti-Atlas (Morocco). Several mitrate stylophorans have already been described in the Lower and Middle Devonian of South America (Argentina, Bolivia and Brazil). Therefore, the new Ordovician cornute reported here from the Pupusa Formation (Jujuy Province, Argentina) represent the earliest record of the class Stylophora in South America.

