

A new marrellomorph euarthropod from the Early Ordovician of Argentina

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Acta Palaeontologica Polonica 62 (1), 2017: 1-8 doi:<http://dx.doi.org/10.4202/app.00240.2016>

Marrellomorphs (class Marrellomorpha) are a group of Paleozoic arthropods with a very poor fossil record. Here we describe a new marrellomorph arthropod *Mimetaster florestaensis* sp. nov. from the Tremadocian (earliest Ordovician) of Argentina. The new species is characterized by the shape and direction of the three pairs of principal spines, and the existence of strong secondary spines only in the proximal two-thirds of the anterolateral spines. As a result of phylogenetic analysis the new species integrates a trichotomy with *Mimetaster hexagonalis* and a Moroccan unnamed marrellid as sister groups. This discovery increases the known diversity of Marrellomorpha and represents the first occurrence of this group in South America, expanding the spatial distribution of the clade.

Key words: Marrellida, Mimetasteridae, Tremadocian, Floresta Formation, Argentina, Salta.

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