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MORPHOLOGICAL VARIABILITY WITHIN THE MITRATE *MITROCYSTELLA INCIPIENS* (ECHINODERMATA, STYLOPHORA) FROM HIGH-LATITUDE PERI-GONDWANAN REGIONS

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The mitrate *Mitrocystella incipiens* (Barrande, 1887) is a locally abundant stylophoran echinoderm, with a short stratigraphic range (late Darriwilian, *H. copiosus* graptolite Zone), but a wide palaeobiogeographic distribution in high-latitude peri-Gondwanan regions of the Mediterranean Province: Czech Republic (Prague Basin), France (Armorican Massif), northern Portugal, and Spain (Hesperian Massif). Two regional subspecies were identified by Chauvel (1937), on the basis of the morphology of their posterior thecal margin: slightly curved in Bohemian forms (*M. incipiens incipiens*), straight and truncated in Ibero-Armorican specimens (*M. incipiens miloni*). Therefore, the main objective of this study is to analyze the morphological disparity within the genus *Mitrocystella*, in order to test the existence of the two distinct morphotypes "incipiens" and "miloni". A representative sample of 40 complete and well-preserved individuals from Armorica, Bohemia and Iberia was selected. The geometric morphometric analysis of their theca confirms the existence of morphological differences between Armorican and Bohemian populations, but it also identifies that the Iberian specimens are morphologically intermediate between those from Brittany and the Prague Basin. These results support the idea that all populations of *Mitrocystella* belong to the same species, *M. incipiens*, which is characterized by a broad phenotypic plasticity. This ecophenotypism likely results from subtle environmental differences between the three regions, possibly related to bathymetry, nutrient availability, and/or volcanic activity (pH). Finally, the first example of teratological thecal plating in *Mitrocystella incipiens* is observed in a specimen from Spain. These results could thus be illustrated during an oral session.

References

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