Crural bases position as a structural criterion for supraspecific diagnosis of Early Jurassic zeilleriid brachiopods

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Analysis of the internal structure carried out on several representative genera of the brachiopod family Zeilleriidae from the Lower Jurassic of the Betic Ranges (SE Spain), complemented with specimens from nearby domains such as the Iberian Range and Lusitanian Basin, has enabled to propose a model for discrimination of genera based on the relative position of the crural bases with respect to the hinge plates. This particular feature has been analysed in the genera Zeilleria, Bakonyithyris, Securina, Neozeilleria, Cincta, Aulacothyris, and Plesiothyris, revealing three different basic patterns of crural bases arrangement: a Zeilleria-type, with crural bases distinctly arising from the ventral side of the hinge plates; a Securina-type, with crural bases originating transversally to the hinge plates and dorsally prominent; and a Bakonyithyris-type, intermediate between both previous patterns.

Key words: Brachiopoda, Zeilleriidae, systematics, brachidium architecture, Jurassic, Western Tethys.

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