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Intraspecific variability in paradoxidid trilobites from the Purujosa trilobite assemblage (middle Cambrian, northeast Spain)

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Eccaparadoxides? *pradoanus* and *Eccaparadoxides mediterraneus* are both widespread trilobite species described from the middle Cambrian of the Mediterranean region. Analysis based on a pooled sample of 500 specimens demonstrates that many of the characters that have been used to define these species show continuous variations, some of which are related to ontogeny. In addition, morphometric analyses of metric characters show that the two species cannot be distinguished on the basis of these characters either. Many of the characters studied herein are widely used in definitions and descriptions of other paradoxidid species, which suggests that the taxonomic classification of other paradoxidids may be oversplit.

Key words: Arthropoda, Trilobita, Paradoxididae, morphological plasticity, taphonomy, Cambrian, Murero Formation, Spain.

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