

New Lower Kimmeridgian ataxioceratin ammonite from the eastern Iberian Chain, Spain: Systematic, biogeographic and biostratigraphic relevance

Luis Moliner and Federico Olóriz

Acta Palaeontologica Polonica 55 (1), 2010: 99-110 doi: <http://dx.doi.org/10.4202/app.2008.0064>

New ammonites collected bed-by-bed from the upper part of *Ataxioceras hypselocyclum* Chronozone deposits in the eastern Iberian Chain are described as *Geyericeras* gen. nov. The new genus includes micro- and macroconchiate Ataxioceratinae of small size, with moderate to loose coiling and subpolyplocoid ribs, a character crucial for its identification. Key points for the comparative identification of *Geyericeras* gen. nov. are: (i) microconchiate *Geyericeras* show morphological convergence with evolute specimens of the stratigraphically older genus *Schneidia* [m]; (ii) contemporary Ataxioceratinae genera such as *Ardescia* [m, M] and *Lithacosphinctes* [m, M] did not develop subpolyplocoid ribbing; (iii) smoothing of sculpture combined with short primary ribs are not realized in *Geyericeras* gen. nov. [M] and can be therefore used to separate the new genus from *Ataxioceras* [M]; and (iv) smaller shells, and weaker and less dense ribbing with no parabolic structures differentiate *Geyericeras* gen. nov. [m, M] from *Parataxioceras* [m, M], as well as the type of subpolyplocoid ribs seen among microconchiate specimens of these two genera. The new species *Geyericeras aragoniense* sp. nov. is the index and guide fossil for identification of a biohorizon occurring below the first occurrence of the genus *Crussoliceras* in the eastern Iberian Chain.

Key words: Ammonoidea, *Geyericeras*, Ataxioceratinae, Lower Kimmeridgian, Jurassic, Iberian Chain, Spain.

Luis Moliner [lmoliner@ensaya.es], ENSAYA Laboratory, Aneto no 8, 50410 Cuarte de Huerva, Zaragoza, Spain;; Federico Olóriz [foloriz@ugr.es], Department of Stratigraphy and Paleontology, Faculty of Sciences, University of Granada, Av. Fuentenueva s/n, 18002 Granada, Spain.

Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(471.0 kB\)](#)