

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

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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.

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