

## Palaeontological Note

# A new *Karsteniceras* from the Barremian (Lower Cretaceous) of Colombia

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The small heteromorphic ammonite *Karsteniceras aequicostatum* n. sp. (open spired shell with uniform, simple ribs) from the Barremian of the Villa de Leyva region, Colombia, is described.

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### Systematic description

The following morphological abbreviations are used: H, whorl height; W, whorl width. The described material is deposited in the Nationaal Natuurhistorisch Museum (National Museum of Natural History), Leiden, The Netherlands (RGM).

Suborder Ammonitina Hyatt, 1900  
Superfamily Perisphinctaceae Steinmann, 1890  
Family Bochianitidae Spath, 1922  
Subfamily Leptoceratoidinae Thieuloy, 1966  
Genus *Karsteniceras* Royo & Gomez, 1945

*Type-species* — *Ancyloceras Beyrichi* Karsten, 1858, from the Barremian of Colombia.

*Karsteniceras aequicostatum* n. sp.

Fig. 1.

?1986 *Moutoniceras* (?) sp. nov. – Myczynski & Triff: 130, pl. 3, figs. 5, 7.

*Holotype* — RGM 212 422, fieldnumber M512A, Barremian, Loma la Asomada, Colombia.

*Derivatio nominis* — *aequicostatum*, Latin, meaning uniformly ribbed.

*Diagnosis* — An open spired shell with uniform, simple, ring-like ribs. In the siphonal area there is a near-imperceptible weakening of the ribs. At both sides of the

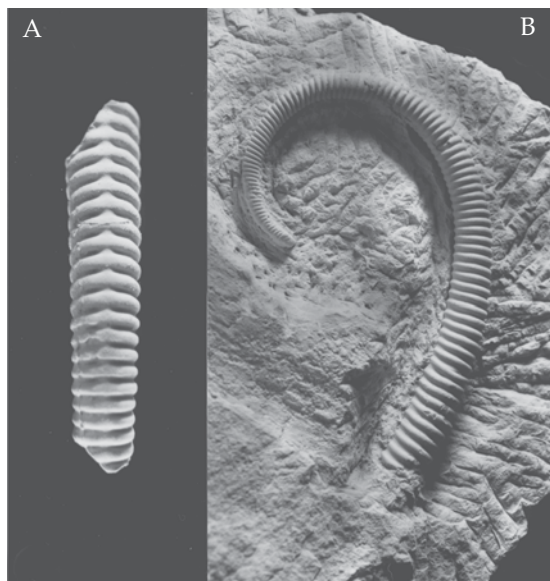


Fig. 1. *Karsteniceras aequicostatum* sp. nov., RGM 212 422, Barremian (Lower Cretaceous), Loma Asomada, Villa de Leyva, Colombia. (A) Ventral view, ? 2. (B) Lateral view, ? 1.

siphonal area ventrolateral tubercles are weakly indicated.

*Material* — The holotype, RGM 212 422, an incomplete and undistorted external mould. The juvenile whorls are not preserved.

*Description* — A medium-sized shell coiled into a widely open spiral. A slight torsion of the shell can be discerned. The whorl section is circular. The shell is covered by uniform, simple, evenly distributed, ring-like ribs that are straight, faintly proverse and are not interrupted. In the siphonal area, however, a weakening of the ribs is visible. In the adult part of the shell small, weak ventrolateral tubercles are present on most ribs. The preserved part of the juvenile spiral reaches a maximum diameter of 28.0 mm. The vaulted adult part is almost 50.0 mm. In the central part of the shell the whorl

height (H) and the whorl width (W) are the same, 5.4 mm.

*Remarks* — The specimen has no preserved suture lines, which makes any assignment to genus somewhat uncertain. The morphology of the shell resembles, to a certain extent, the genus *Moutoniceras* Sarkar. The whorl section of *Moutoniceras* is, however, oval and the shell usually has a much larger diameter (Delanoy *et al.*, 1991). As the suture of the RGM specimen is not preserved, one could only rely on the morphology of the shell. When it is compared with *Moutoniceras*, it becomes obvious that the new species differs from *Moutoniceras moutonianum* (d'Orbigny, 1850) and its relatives (whose juvenile whorls are also coiled in a very loose crioconic spiral, but whose adult whorls do not have a circular section) in the smaller size (when it is assumed that the adult part is preserved), in the circular whorl section, in the weaker tubercles and in the ribs not fading away on the dorsal side.

The shell designated by Avram as *Moutoniceras varusense* (d'Orbigny, 1850) (Avram, 1976, pl. 3, fig. 10) shows a strong resemblance to the Colombian specimen. *Moutoniceras varusense* differs, however, in its greater size; in spite of its crushing it can be seen that it has an oval whorl section and, thus, was assigned to *Moutoniceras*. The type of ribbing and the slow increase of the whorl height, also shown by the imperfectly preserved shells from Cuba designated by Myczyński & Triff (1986, p. 130, pl. 3, figs. 5, 7) as *Moutoniceras?* sp. nov., show a close resemblance to the Colombian species. However, only the juvenile crioconic whorls of unknown cross section are preserved. The morphology of the adult shell is not known nor any suture line, and in contrast to the Colombian species constriction are present. It is not certain

whether the Colombian specimen is identical to the Cuban one.

With respect to the circular whorl section and slight torsion of the shell, we suppose that the Colombian species belongs to the genus *Karsteniceras*. The other species of *Karsteniceras*, such as *K. beyrichi* (Karsten, 1858), *K. hoheneggeri* Vašíček & Wiedmann, 1994, and *K. multicoatum* Kakabadze & Hoedemaeker, 1997, differ from the new species especially in the presence of constrictions and of non-uniform ribbing. Whether the species *K. multicoatum* really belongs to the genus *Karsteniceras* is uncertain because the suture line is unknown, and the whorl section of the mature specimen is oval.

*Distribution and occurrence* — Barremian, Loma la Asomada, Colombia. Barremian of Cuba?

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