

Note on Beyrichoceras from Los Santos de Maimona (SW Spain)¹

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RESUMEN

Se han localizado Goniatítidos en dos niveles distintos, dentro de la cuenca carbonífera de Los Santos de Maimona. El horizonte inferior se encuentra en la Unidad 4 y ha aportado un solo ejemplar, identificado como *Beyrichoceras cf. parkinsoni*. El segundo horizonte corresponde a la Unidad 7 y ha aportado numerosos ejemplares comprimidos y mal conservados, identificados como *Nomismoceras*. A partir de los datos aportados por los goniatítidos, se confirma que la edad de ambas Unidades corresponde a la parte inferior del Viseense superior. Se describe y figura el ejemplar de la Unidad 4.

Palabras clave: *Beyrichoceras*, Goniatites, Santos de Maimona, Ossa-Morena, Viseense superior.

Key words: *Beyrichoceras*, Goniatites, Santos de Maimona, Ossa-Morena, Upper Viséan.

INTRODUCTION

Goniatites from Los Santos de Maimona in Southwest Spain have been found in two horizons. The older horizon belongs to the Unit 4; the section La Alameda-I yielded only one specimen determined as *Beyrichoceras cf. parkinsoni*. Slightly younger is the horizon of the Unit 7 of the section Rivera de Guadajira-I

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containing numerous but poorly preserved representatives of the genus *Nomismoceras*. Both layers have about the same age: lower part of the Upper Viséan. The *Beyrichoceras* horizon is close to the base of the Upper Viséan, whereas the *Nomismoceras* bearing beds represent a higher horizon within the lower part of the Upper Viséan. In the following, only the best preserved goniatite will be described and figured.

Family *Muensteroceratidae*³ LIBROVICH, 1957

Genus *Beyrichoceras* FOORD, 1903

Beyrichoceras cf. parkinsoni BISAT, 1934

(Pl. 21, fig. 4-5)

cf. 1934 *Beyrichoceras parkinsoni* BISAT, p.295, text-fig.12-14.

cf. 1992 *Beyrichoceras parkinsoni* - KORN y KULLMANN in GONIAT Database, taxno. 2137.

The only specimen is a juvenile internal cast of about 15 mm diameter, which is completely septate. Its test is not visible. A cross section of the small goniatite has not been made.

The conch form is thickly discoidal and highly involute, with a maximum thickness at the umbilical shoulder. The umbilicus is very narrow, almost closed. The flanks are convex, the ventral side is not preserved. There are no constrictions. The dimensions are: Diameter: 15,7, whorl width: 10.8, whorl height: 9,5, umbilicus about 1,2 mm.

The suture line (text-fig. 39B) shows a relatively wide ventral lobe with a moderately low median saddle. The sides of the ventral lobe are orad diverging and sinuous; the tips of its branches are slightly diverging in the apical direction. The lateral saddle is rounded, almost subacute. The adventitious lobe is V-shaped, acute, with convex sides.

The specimen resembles very much *Beyrichoceras parkinsoni* BISAT, 1934: the outline of the shell and the suture (cp. fig. 39A and B) are almost identical. Because the Spanish form is juvenile, an identification with this species is not possible with certainty.

Age: *Beyrichoceras* is known to occur in Europe from the upper part of the Lower Viséan (Pe delta, V3a) till the middle portion of the Upper Viséan (Go alpha/beta, P1a). *Beyrichoceras parkinsoni* is known from the B2 beds (= lowermost *Goniatites* zone, Go alpha 1-2) in Yorkshire (England).

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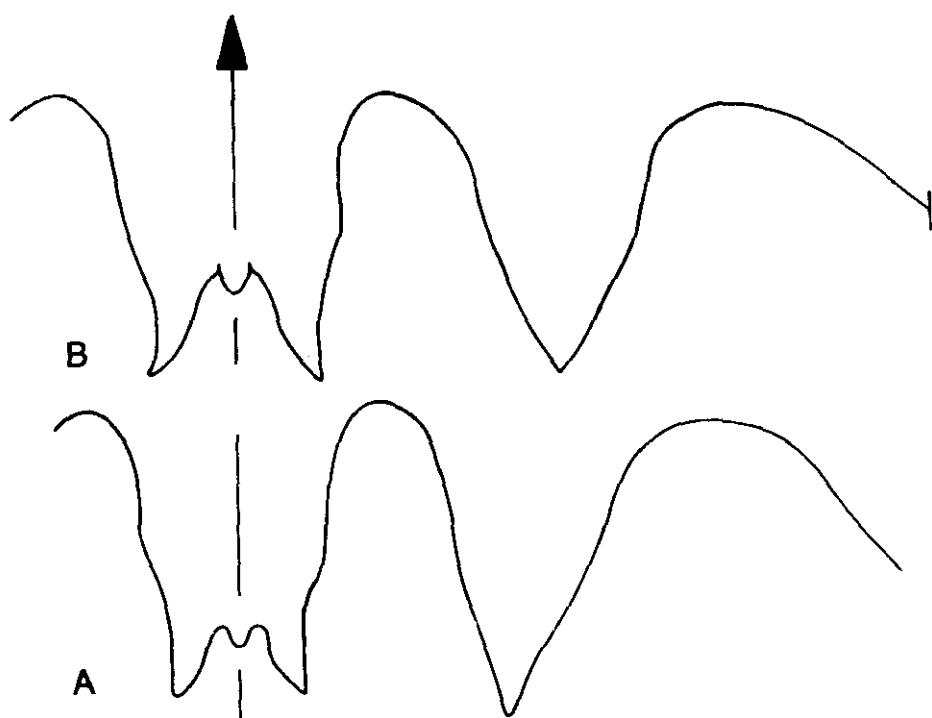


Figure 39.—A: *Beyrichoceras parkinsoni* BISAT, 1934, holotype, Yorkshire, Great Britain, suture line at 21 mm diameter, x4.4. B: *Beyrichoceras cf. parkinsoni* BISAT, 1934, LA1-0-1, La Alameda 1, Los Santos de Maimona, suture line at 14.9 mm diameter, x6.6.

Figura 39.—A: *Beyrichoceras parkinsoni* BISAT, 1934, holotipo, Yorkshire, Gran Bretaña, línea de sutura con 21 mm de diámetro, x4.4. B: *Beyrichoceras cf. parkinsoni* BISAT, 1934, LA1-0-1, La Alameda 1, Los Santos de Maimona, línea de sutura con 14.9 mm de diámetro, x6.6.

REFERENCES

- BISAT, W. S. (1934): «The Goniatites of the *Beyrichoceras* Zone in the North of England». *Proceedings of the Yorkshire Geological Society*, **22** (4): 80-309, 1 fig, pl. 17-24.
- KORN, D., y KULLMANN, J. (1992): *GONIAT Database System, Version 92.20*, Tübingen.

