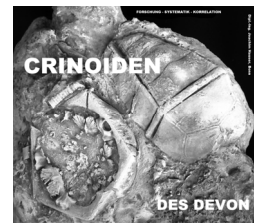


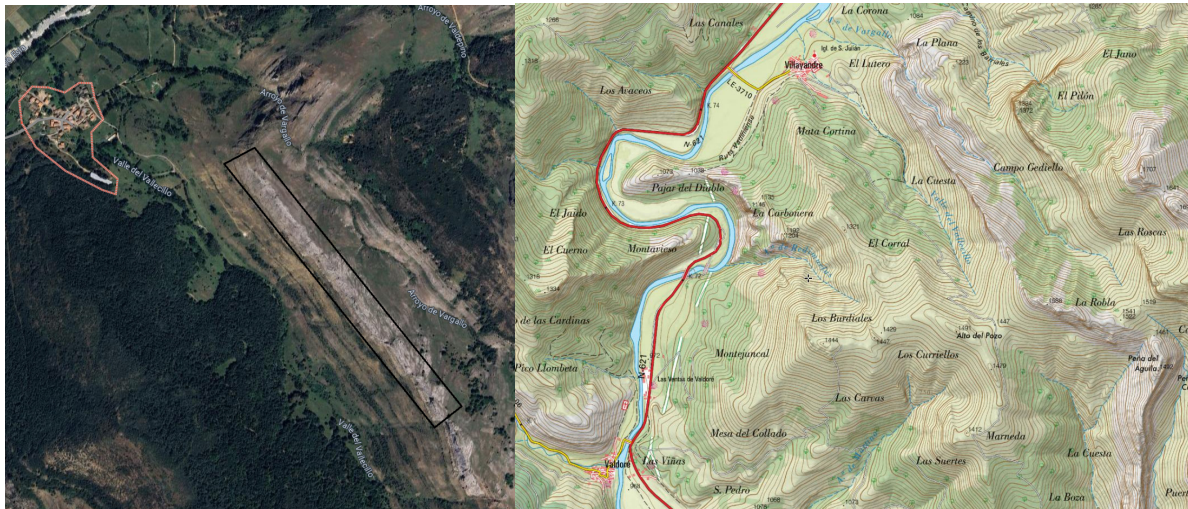
**Paleontological notes of the occurrences of  
*Verneulicrinus landetai* HAUSER, 2013 (Crinoidea, Inadunata)  
from the La Vid-Shale (Upper Lower Devonian)  
of Villayandre Province León, Northern Spain)**

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with 3 pages and 6 textfigures  
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**1 Introduction**

Until some fieldtrips with my friend, Fernando Gómez LANDETA, we visited also the Devonian outcrops in the Esla-Region. BREIMER, 1962 described from this region a few crinoid species mainly stored in Spanish collection of some Universities (mainly Madrid, Oviedo) collected by students of Leiden-Institute until geological and stratigraphical studies of the Cantabrian Mountains.



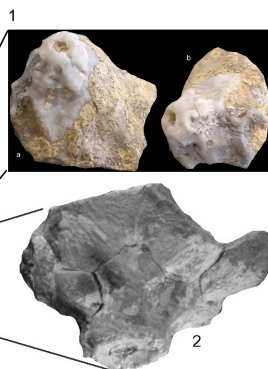
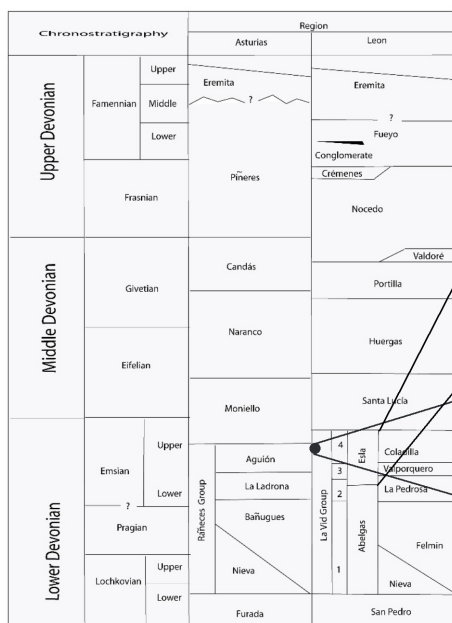
†Textfigur 1 (left): Screen-shot of google-maps, □ showing the main outcrop ~1,5 km SW of the hamlet of Villayandre; (right): Screen-Shot of sigpac®, showing the Esla-region with Villayandre

Until one of this field-trips the author found a complete calyce of *Verneulicrinus landetai* in one of the marly layers of the very well exposed La Vid Formation. The La Vid Formation of this outcrop yield hundreds of *Trybliocrinus*-stems (like in Colle) but less other fossils, some exposed layers seems to be without fossil-remains. This calyce and one specimen of Felix COLLANTES are the first notes of the occurrence of this genus of the Esla-region (Cantabrian Mountains, Northern Spain).

**Kurzfassung:** Zum ersten mal wird der Nachweis von *Verneulicrinus landetai* HAUSER, 2013 (Crinoidea, Inadunata) aus dem Oberen Unterdevon der Esla-Region (Kantabrische Gebirge, Provinz León, Nordspanien) geführt.

**Abstract:** At the first time *Verneulicrinus landetai* HAUSER, 2013 (Crinoidea, Inadunata) is described of the Esla-Region of the Cantabrian Mountains (Province León, Northern Spain).

**Schlüsselwörter:** Crinoiden, Inadunata, Dendrocrinidae, Systematik, Emsium, Unterdevon, Provinz León, Nordspanien



**Key-Words:** Crinoids, Inadunata, Dendrocrinidae, systematics, Emsian, Lower Devonian, Province León, Northern Spain

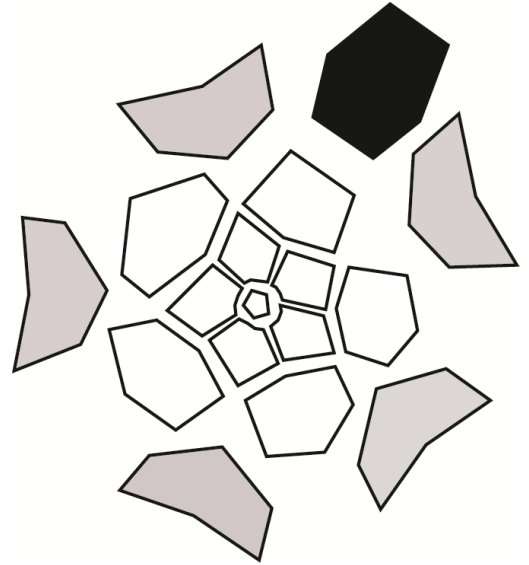
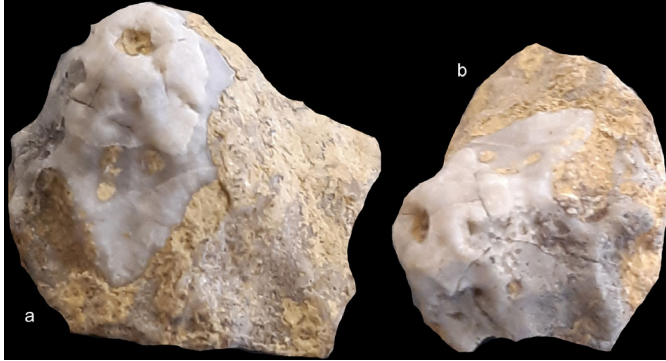
← Text-figure 2: Chronostratigraphy of the north-spanish Devonian (Asturias und León) after GARCIA-ALCALDE, J.L., CARLS, P., ALONSO, M.U.P., LÓPEZ, J.S., SOTO, F., TRUOLS-MASSONI, M. & VALENZUELA-RIOS, J.I. (2002): p. 69, fig. 6.2; the ● show the stratigraphical position of the locus typicus (Xivares); no. (1): *Verneulicrinus landetai* sp. from Villayandre; no. (2): Holotyp of *Verneulicrinus landetai* from Xivares/Asturias

**3 Systematics**

**Classe** Crinoidea J. S. MILLER, 1821  
**Subclasse** Inadunata WACHSMUTH & SPRINGER, 1885  
**Order** Disparida MOORE & LAUDON, 1943

**Suborder** Dendrocrinina BATHER, 1899  
**Superfamily** Dendrocrinacea WACHSMUTH & SPRINGER, 1886  
**Family** Dendrocrinidae WACHSMUTH & SPRINGER, 1886  
**Genus** *Verneuilicrinus* HAUSER, 2013

→ **Textfigure 2:** Plate diagram of *Verneuilicrinus* HAUSER, 2013; black = anal X, grey = radialia



↑ **Textfigure 3a-b:** *Verneuilicrinus landetai* sp. from Villayandre (Esla-region, Cantabrian Mountains, Northern-Spain); Collection of Felix COLLANTES, Palencia

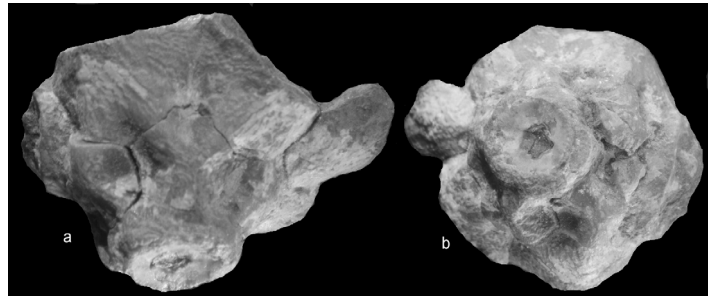
**Stratigraphical range:** Lower Devonian (Upper Emsian)

**Related species:** *Verneuilicrinus thymos*, (KAMMER, 2001), *Verneuilicrinus ibericus* (KAMMER, 2001), *Verneuilicrinus landetai* HAUSER, 2013

→ **Textfigure 4 a-b:** Holotyp of *Verneuilicrinus landetai* HAUSER, 2013

*Verneuilicrinus landetai* HAUSER, 2013  
Figures 3-4

**Holotyp:** The holotype is stored in the collection of the Departamento de Paleontología de la Universidad de Oviedo (Asturias, Northern Spain).



**Locus typicus:** North part of the beach of Xivares near the cliff called “Pozo de los Muiles”, 6 km NW of Gijón, Asturias, northern Spain.

The paratype (collection of Felix COLLANTES, Palencia) found ~ 1,5 km NE of the hamlet of Villyandre, Esla Province, Cantabrian Mountains, Northern Spain.



↑ **Textfigure 5:** Outcrop of the Paratype of the author of *Verneuilicrinus landetai* sp. near the hamlet of Villayandre; the red point shown the stratigraphical position of the main crinoid-member of the exposed profil

**Description of the holotype:** The holotype is a more or less complete calyce. Cup like the holotype low bowl-shaped, composed by convex basalia (BB) and radialia (RR) much wider than high. All plates of medium thickness included the small plates of the infrabasals (IBB). The basal-plates are clearly visible in side view. The plates form in cross view concentric edges running from the middle of the radial-facets to the center of the basals. Radial facets U-/"horse-shoe"-shaped without channel. Stem and lumen (in medium size) are pentagonal. CD-section very well preserved with only one large +/- rhombic-formed anal X.

The paratype of Felix COLLANTES figures in textfigure 3a-b shown a more or less broken calyce: two radialia, three IBB and die complete BB are preserved. The main surface and most of the plate-boarders are covered with crystalline lime. However, the calyce shown a typical *Verneuilicrinus landetai* species.

A second complete calyce was found by the author 9 years ago until a field-trip with Fernando. This calyce was found in situ embedded in soft brown marl (see textfig. 5). A short story to this finding: it was a hot day in the mountains and we must climbed up together a hill until we reach uncovered area. Fernando walk more quickly than the author "through the hill" found nothing: me crawling slowly on the knees step by step until I found a crushed calyce of *Pyxidocrinus* aff. *collensis* BREIMER, 1962, and 5 minutes later a calyce of *Verneuilicrinus landetai*. The only problem: the crinoid "fall in situ in his segments" and I've had forget the superglue! So I return to the car, 1 km of the outcrop to the car, 30°, down and up the hill: after this I asked myself: what we do to find crinoids? And: Fernando was not amused seeing me running down the hill because he do'nt know the reason of my actions in the fields.

→ **Figure 6:** Crushed calyce of *Pyxidocrinus collensis* BREIMER, 1962 of the La Vid Shale of Villayandre (height and diameter ~ 2,3 cm)

**Dimensions:** Paratype: Diameter <sub>max.</sub> = 1,4 cm, height: 0,5 cm; holotype: Diameter <sub>max.</sub> = 1,5 cm, height: 1 cm.

**Acknowledgements:** My special thanks goes to Felix COLLANTES, Palencia, who gave some crinoid-specimens for studys to the author. My friend, Fernando Gómez LANDETA, Oviedo, shown me the outcrop and explain the stratigraphy.



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