



**MYELODACTYLUS SPATULATUS LEMENN, 1987  
(CRINOIDEA, COL.) FROM THE LOWER DEVONIAN ZLÍCHOV  
LIMESTONE OF THE BARRANDIAN AREA, CZECH REPUBLIC**

**Rudolf J. Prokop**

*Department of Palaeontology, National Museum, 115 79 Praha 1, Czech Republic*

Received April 18, 2002-06-18

Accepted May 22, 2002

**Abstract.** Columnals and stem fragments of the crinoid *Myelodactylus spatulatus* LEMENN, 1987 were discovered in the Bohemian Lower Devonian (Zlíchovian). It is the only find of this species outside the Lower Devonian Formations in the Armorican Massif, France.

■ Crinoidea, *Myelodactylus*, Lower Devonian, Barrandian, Czech Republic.

During the systematic study of Bohemian Palaeozoic echinoderms, isolated columnals and pluricolumnals of the crinoid *Myelodactylus spatulatus* LEMENN, 1987 (col.) were found in the washed weathered parts of yellowish biosparite limestones of the "Chapel coral Horizon" at the base of the Zlíchov Limestone (Lower Emsian). This species has already been recorded and described by Jean LeMenn (1987) from the Saint-Céneré Formation (Upper lochkovian-Pragian) of the Laval Synclinorium, Armorican Massif, France.

SYSTEMATIC PALAEOLOGY

Subclass Inadunata WACHSMUTH et SPRINGER, 1885

Order Disparida MOORE et LAUDON, 1943

Family Myelodactylidae S. A. MILLER, 1883

*Myelodactylus* HALL, 1852

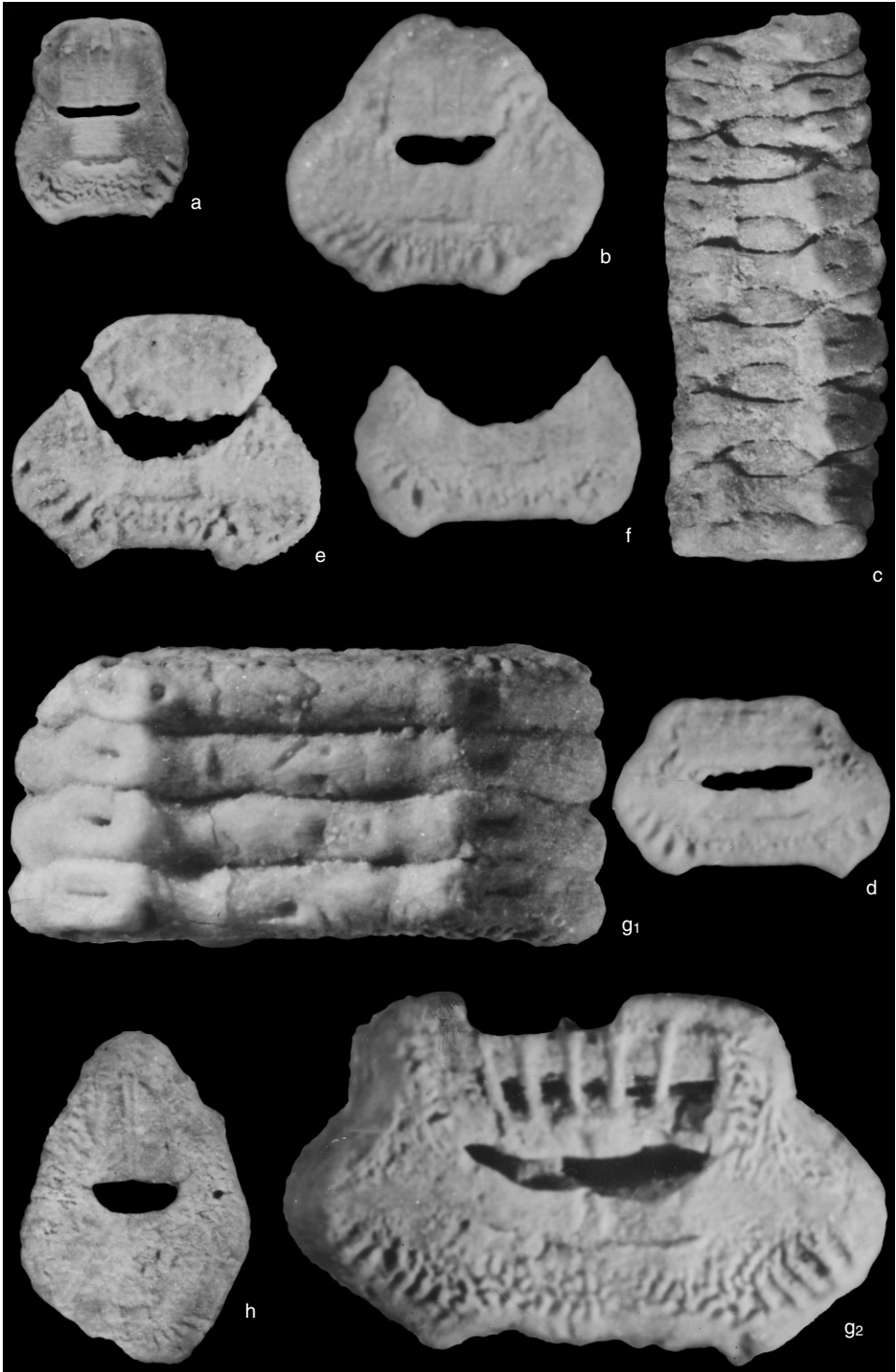
Type species: *Myelodactylus convolutus* SPRINGER, 1926, Silurian, USA.

***Myelodactylus spatulatus*** LEMENN, 1987 (col.)

(Pl. I. a–h)

**Material:** More than a hundred columnals and pluricolumnals isolated from washings of the "Chapel coral Horizon" at the base of the Zlíchov Limestone. All specimens hitherto known come from the classical locality, i. e. quarry "U kapličky" ("by the Chapel"), Praha-Zlíchov.

**Remarks:** *Myelodactylus spatulatus* LEMENN, 1987 (col.) found in the Bohemian Lower Emsian (Zlíchovian) fully corresponds with the specimens from the Armorican Massif described and illustrated by LeMenn (1987). The columnals are thin, uniform, bilaterally symmetrical, roundly trapezoidal in outline, with flat and smooth latera. Articular facets show a large, slity to crescentic lumen, a broad, flat inexpressive fulcrum and



markedly developed inner ligamentary area with more or less radially arranged ligamentary impressions. Outer ligamentary area is narrower than the inner one, with ligamentary impressions arranged subparallelly.

**Occurrence:** Stem ossicles most probably identical with the species described here, were discovered also in the washings from the Kotýz Limestone (Lochkovian) and from Slivenec, Loděnice and Dvorce-Prokop Limestone (Pragian). In accordance with the stratigraphic distribution of the French specimens i. e. Upper Lochkovian-Pragian seems, that *Myelodactylus spatulatus* LEMENN, 1987 occurs only in the Lower Devonian strata. No specimens have been found in the Middle Devonian deposits neither in France nor in Bohemia.

Dimensions of the columnals in mm:

	L 33012	L 33013	L 33014	L 33015	L 33016	L 33017	L 33018	L 33019
A	6.0	5.0	3.2	5.1	5.0	5.9	5.5	10.9
B	8.9	4.4	1.9	3.0	-	5.0	4.9*	6.2
C	0.6	1.0	0.6	0.9	1.0	1.0	0.8	1.2

\*approximately

A= max.width of articular facet

B= max. height of articular facet

C= height of latera

## REFERENCES

- Barher, F. (1893): The Crinoidea from Gotland. Part I. The Crinoidea Inadunata. – Kongliga Svenska Vetenskaps-Akademiens Handlingar, 25, 2: 1–200, Pls I–X. Stockholm.
- LeMenn, J. (1987): Nouveaux échinodermes des schistes et calcaires du Dévonien inférieur du Bassin de Laval (Massif Armoricaïn, France). – Geobios, 20, 2: 215–235, 2 pl. Lyon.

← Plate I. – *Myelodactylus spatulatus* LEMENN, 1987: a – L 33013, isolated columnal from the proximal part of stem (morphotype 2 according to LeMenn (1987), × 5.6; b – L 33017, columnal from the middle part of stem (morphotype 3 according to LeMenn 1987), × 6.6; c – L 33014, pluricolumnal from the proximal part of stem showing transition from the bijugicirrus (bottom of the figure) to alternicirrus (in sense of Bather 1893) disposition of the columnals – *identical transition is shown by LeMenn 1987, on the Pl. I, fig. 5.*, × 8.4; d – L 33015, columnal from the distal part of stem (LeMenn's morphotype 3), × 6.7; e - L33018, distal columnal with broken and partly separated outer part, × 7.4; f – L 33016, isolated inner part of a broken columnal, usual state of preservation of the myelodactylid columnals in washings, × 6.7; g - L 33019, pluricolumnal from the distal part of stem of a gerontic specimen: g<sub>1</sub> – articular facet, g<sub>2</sub> – pluricolumnal in a lateral view showing bijugicirrus disposition of columnals (in sense of Bather 1893) i. e. the cirri are regularly paired on successive columnals, × 7.6; h – L 33012, pathological columnal, × 5.4.

Lower Devonian, Lower Emsian (Zlíchovian), “Chapel coral Horizon” at the base of the Zlíchov Limestone. “U kapličky quarry”, Praha-Zlíchov. All specimens are housed in the collections of the Palaeontological Department of the National Museum (Museum of Natural History), Prague. *Photo author.*