



**RAMACRINUS ROBUSTUS SP. N. (CRINOIDEA, INADUNATA)
FROM THE KONĚPRUSY LIMESTONE, LOWER DEVONIAN,
BARRANDIAN AREA (CZECH REPUBLIC)**

Rudolf J. Prokop

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

Received April 18, 2002

Accepted May 22, 2002

During the systematic research of the Lower Devonian reef complex near Koněprusy carried out within the last six years, a lot of new echinoderm taxa have been found in the Koněprusy Limestone. A new crinoid species, discovered in the white organoclastic limestones deposited in the central part of the reef complex, is described here as *Ramacrinus robustus* sp. n.

Subclass Inadunata WACHSMUTH et SPRINGER 1885

Order Disparida MOORE et LAUDON, 1943

Family Ramacrinidae PROKOP, 1977

Ramacrinus PROKOP, 1969

Type species: *Ramacrinus multiformis* PROKOP, 1969; Lower Devonian, Lower Emsian (Zlíchovian), Zlíchov Formation; Barrandian area, Bohemia, Czech Republic.

***Ramacrinus robustus* sp. n.**

2000 *The loreus?* sp. (*Ramacrinus?* sp.); R. J. Prokop: Investigation of echinoderms..., p. 72.

Holotype: NM L 36854, isolated cup figured here on Fig 1a,b.

Paratype: NM L 36855, cup, weathered out on the surface of a limestone sliver, figured here on Fig. 1c, d.

Stratum typicum: Lower Devonian, Pragian, Koněprusy Limestone.

Locus typicus: "Císařský lom" quarry, Koněprusy, Bohemia.

Material: Besides types one cup, NM L 37169, weathered out on the surface of a limestone sliver.

Description: Cup of truncated-cone shape with moderately oblique walls, formed of five, thick, conformable BB and five RR. Basals extending to ca. 1/3 of the cup height. Five high radials of the same trapezoidal outline. Two radials, in A and D rays undivided, the three remaining radials (in B, C, and E rays) transversely divided by convex suture into a relatively long inferradial and a short, broad superradial. The sutures in ER and CR are inexpressive, barely visible, in BR well developed. Incision for anal plate X is sharp, shallow. Radial facets occupy the entire width of the upper margin of RR and reach ca. 1/3 of the ventral cavity. Ligament impression straight, fine, close to the outer margin of RR. Fulcral ribs prominent, transversely dentate. Muscle fossae are not visible in the specimens available. Arms and stem unknown.

Remarks: *Ramacrinus robustus* sp. n. differs from all known species of the genus *Ramacrinus* (cf. Prokop 1969, 1977, LeMenn and Prokop 1980) by straight, slender cup (re-

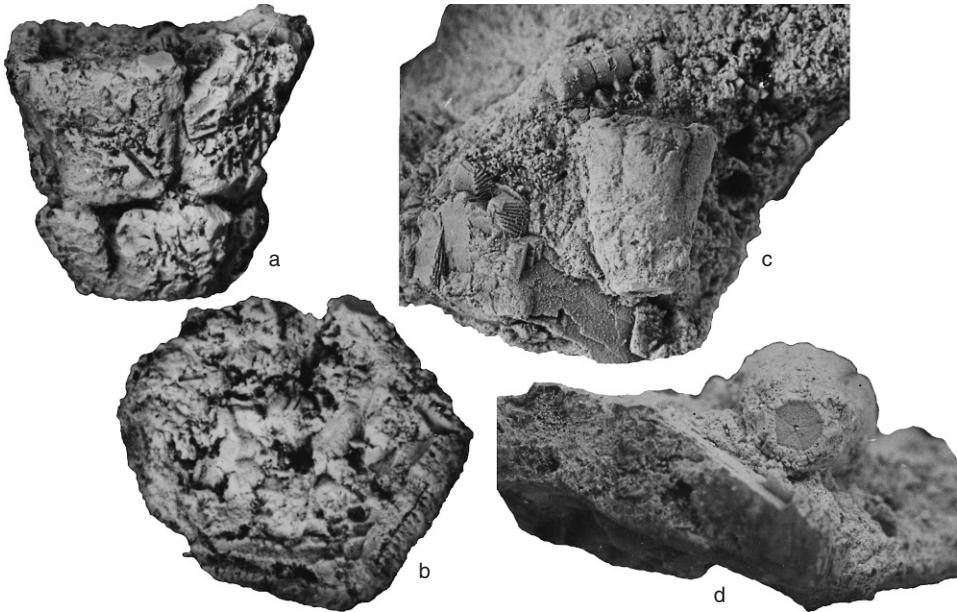


Fig. 1: *Ramacrinus robustus* sp. n.: a – holotype, L 36854, posterolateral view. $\times 4$; b – ditto, oral view. $\times 4$; c – paratype, L 36855, anterolateral view. $\times 3$. d – ditto, basal view. $\times 3$; Lower Devonian, Pragian, Koněprusy Limestone, Koněprusy, "Císařský lom" quarry. All species housed in the repository of the Palaeontological Department of the National Museum (Museum of Natural History), Prague, catalogue L.

maining the cup of the genus *Theloreus*), extremely thick cup plates, short radial facets and inexpressive sutures dividing the C and E radials (on the contrary with the prominent suture dividing BR).

Occurrence: *Ramacrinus robustus* sp. n. occurs only in the Koněprusy Limestone of the Koněprusy reef complex.

Dimensions in mm:	holotype L 36854	paratype L 36855	L 37169
total high of cup	10.0	6.5	4.0
height of basals	3.0	2.8	1.1
max. (brachial) width of cup	8.5	6.5	4.6
width of cup base	3.0	2.8	2.2

ACKNOWLEDGEMENTS

I am indebted to Dr. Radvan Horný (National museum) for critical reading of the manuscript of this article. The study was realized within the framework of the contract between the National Museum, Prague, and the Management of the quarries "Čertovy schody" (project MKOCEZ99F0201).

REFERENCES

- LeMenn, J. – Prokop, R. J. (1980): Calceocrinids and new ramacrinid (Crinoidea, Inadunata) from the Lower Devonian of Bohemia and Armorican Massif. – *Géobios*, 13, 2: 245–251, 1 Pl. Lyon.
- Prokop, R. J. (1969): *Ramacrinus multiformis* gen. et sp. n. (Synbathocrinidae, Crinoidea) in the Devonian of Bohemia. – *Věst. Ústř. Úst geol.*, XLIV, 6: 375–377, 2 Pls. Praha.
- Prokop, R. J. (1977): The family Ramacrinidae fam. n. (Crinoidea) in the Devonian of Bohemia. – *Čas. Min. Geol.*, 22, 1: 43–47, 4 Pls. Praha..
- Prokop, R. J. (2000): Investigation of echinoderms of the Koněprusy limestone (Lower Devonian Pragian) in the Barrandian area (Czech Republic). – *Geosci. Res. Reports for 1999*: 71–73. Czech Geol. Survey, Praha.