

TREATISE ONLINE

Number 169

Part R, Revised, Volume 1, Chapter 8T23:
Systematic Descriptions: Section Callichimaeroida

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2023

KU PALEONTOLOGICAL
INSTITUTE

The University of Kansas

Lawrence, Kansas, USA
ISSN 2153-4012
paleo.ku.edu/treatiseonline

PART R, REVISED, VOLUME 1, CHAPTER 8T23: SYSTEMATIC DESCRIPTIONS: SECTION CALLICHIMAEROIDA

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Section CALLICHIMAEROIDA Luque & others, 2019

[Callichimaeroida LUQUE, FELDMANN, VERNYGORA,
SCHWEITZER, CAMERON, KERR, VEGA, DUQUE, STRANGE,
PALMER, & JARAMILLO, 2019, p. 2]

Carapace longer than wide, small and fusiform; sternites 1 to 4 fused and visible ventrally, forming an elongated sternal crown; sternite 4 not mesially depressed; sternites 5–7 unfused and axially sulcate by linea media; sternite 5 very wide, almost as wide as carapace; suture 5/6 complete, lacking sterno-pleonal cavity; pleon symmetrical, sexually dimorphic, narrower in males than females, in both sexes narrower than sternite. Pleonal somites not fused, lacking articulating rings, bearing dorsal median tubercle or crest; pleonites 1 to 3 exposed subdorsally; uropods or uropodal plates absent; orbits absent; eyes large, hemispherical, cornea covered in hexagonal facets; chelipeds isochelous, manus stout, fixed finger strongly deflected; chelipeds folded ventrally and posteriorly beneath carapace; pereopods 2 and 3 large, much larger than 4 and 5, wide, positioned laterally, with distal podomeres flattened and paddle-like; pereopods 4 and 5 short, narrow, subdorsal, directed posteriorly, with dorsal longitudinal keel, lacking spines, neither chelate/subche-

late nor modified for carrying or grasping, neither flattened nor paddle-like; pereopod 5 smallest, well developed but reduced. [Emended from LUQUE & others, 2019.] *Upper Cretaceous (Cenomanian–Turonian).*

Superfamily CALLICHIMAEROIDEA Luque & others, 2019

[Callichimaeroidea LUQUE, FELDMANN, VERNYGORA,
SCHWEITZER, CAMERON, KERR, VEGA, DUQUE, STRANGE,
PALMER, & JARAMILLO, 2019, p. 2]

Diagnosis as for section.

Family CALLICHIMAERIDAE Luque & others, 2019

[Callichimaeridae LUQUE, FELDMANN, VERNYGORA,
SCHWEITZER, CAMERON, KERR, VEGA, DUQUE, STRANGE,
PALMER, & JARAMILLO, 2019, p. 3]

Diagnosis as for section.

Callichimaera LUQUE, FELDMANN, VERNYGORA, SCHWEITZER, CAMERON, KERR, DUQUE, STRANGE, PALMER, & JARAMILLO, 2019, p. 4 [**C. perplexa*; OD]. As for section. *Upper Cretaceous (Cenomanian–Turonian)*: Colombia. *Turonian*: USA (Wyoming).—FIG. 1. **C. perplexa*, Cenomanian–Turonian, Colombia; *1a*, dorsal carapace, paratype, IGM p881203; *1b*, ventral surface and appendages, holotype, IGM p881215; *1c*, anterior dorsal view with eyes, paratype, IGM p881208, scale bars 1 cm (new).

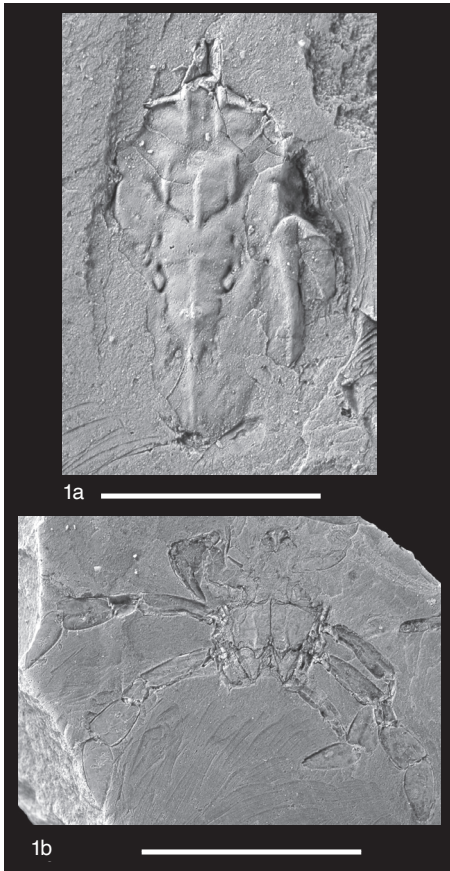


FIG 1. Callichimaeridae (p. 1).

ABBREVIATIONS FOR MUSEUM REPOSITORIES

IGM: Colombian Geological Survey, Bogota DC,
Colombia.

REFERENCES

Luque, Javier, R. M. Feldmann, Oksana Vernygora, C. E. Schweitzer, C. B. Cameron, K. A. Kerr, F. J. Vega, Alex Duque, Michael Strange, A. R. Palmer, & Carlos Jaramillo. 2019. Exceptional preservation of mid-Cretaceous marine arthropods and the evolution of novel forms via heterochrony. *Science Advances* 5: eaav3875 [doi 10.1126/sciadv.aav3875].