

## Crustacean microcoprolites from the Upper Jurassic–Lower Cretaceous of the Neuquén Basin, Argentina: Systematics and biostratigraphic implications

Diego A. Kietzmann, Joachim Blau, Diana E. Fernandez, and Ricardo M. Palma


*Acta Palaeontologica Polonica* 55 (2), 2010: 277–284 doi: <http://dx.doi.org/10.4202/app.2009.0094>

As a result of a microfacial study in the outer and middle ramp deposits of the Vaca Muerta Formation (lower Tithonian–upper Valanginian), four ichnotaxa of crustacean microcoprolites are described: *Palaxius azulensis* Kietzmann isp. nov., *Palaxius caracuraensis* Kietzmann isp. nov., *Helicerina?* isp. A. aff. *Helicerina siciliana* and *Helicerina* isp. B. They represent one of the first records of crustacean microcoprolites for the Neuquén Basin and Argentina. *Helicerina* is reported for the first time from the Upper Jurassic and Lower Cretaceous of South America. It is inferred that *Palaxius* ichnospecies were produced by callianassids, while *Helicerina* ichnospecies could be produced by decapods of Mecochiridae, Erymidae, and/or Nephropidae affinity. Two assemblages of crustacean microcoprolites are recognised, a middle Tithonian to lower Berriasian *Palaxius*–dominated assemblage and an early to late Valanginian *Helicerina*–dominated assemblage.

**Key words:** Crustacean microcoprolites, *Palaxius*, *Helicerina*, Jurassic-Cretaceous, Vaca Muerta Formation, Neuquén Basin, Argentina.

Diego A. Kietzmann [[diegokietzmann@gl.fcen.uba.ar](mailto:diegokietzmann@gl.fcen.uba.ar)], Diana E. Fernández [[elizabeth@gl.fcen.uba.ar](mailto:elizabeth@gl.fcen.uba.ar)], and Ricardo M. Palma [[palma@gl.fcen.uba.ar](mailto:palma@gl.fcen.uba.ar)], Departamento de Ciencias Geológicas, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, Pabellón II, 1428 Buenos Aires, Argentina, and Consejo Nacional de Investigaciones Científicas y Técnicas – CONICET; Joachim Blau [[joachim.blau@geolo.uni-giessen.de](mailto:joachim.blau@geolo.uni-giessen.de)], Feldbergstrasse 5, 61191 Rosbach-Rodheim, Germany.

distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(575.9 kB\)](#)