

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

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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.

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