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General Palaeontology, Systematics and Evolution (Invertebrate Palaeontology)

First occurrence of the Ichnogenus *Selenichnites* from the Middle Jurassic Strata of the Skoura Syncline (Middle Atlas, Morocco); Palaeoecological and palaeoenvironmental context



Première découverte de l'ichnogenre Selenichnites du Jurassique moyen dans le synclinal de Skoura (Moyen Atlas, Maroc) ; contexte paléoécologique et paléoenvironnemental

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ABSTRACT

Mesozoic strata of North Africa yield the first occurrence of the ichnogenus *Selenichnites*. The trace fossils occur on the top surface of a sandy carbonate deposit in the axis of a Middle Atlas syncline (Skoura Syncline, NE Morocco). The ichnofossil-bearing horizon belongs to the Late Bajocian–Early Bathonian Ich Timellaline/Bou Akrabene Formation. The trace fossils are crescent-shaped and the best preserved exhibits a posterior central axial impression (possible telson tail impression). They are interpreted as feeding burrows (fodinichnia) or hiding depressions of Xiphosurids or Limulids (horseshoe crabs) on a sandy carbonate substrate beneath a veneer of muddy deposits. The sedimentological character suggests a relatively protected shallow water subtidal palaeoenvironment preceding the Bathonian regression of the Atlas domain. This discovery provides the first evidence of xiphosurans or xiphosuran-like organisms inhabiting the southern shores of the Tethys in the Middle Jurassic.

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RÉSUMÉ

Des traces d'invertébrés, attribuées à l'ichnogenre *Selenichnites*, ont été découvertes dans les couches d'âge Bajocien supérieur–Bathonien inférieur (formation d'Ich Timellaline/Bou

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