The crest-bearing shrimps from the Sahel Alma Lagerstätte (Late Cretaceous, Lebanon)

Denis Audo and Sylvain Charbonnier

Decapod crustaceans are the most diverse group of fossil invertebrates from the Upper Cretaceous Sahel Alma Lagerstätte (Lebanon, Middle East). They are mainly represented by abundant crest–bearing shrimps which were first described as *Penaeus libanensis*. We review this species applying the new systematic nomenclature and we propose a more complete description based on 54 unpublished specimens. This review leads to the erection of *Palaeobenthesicymus* gen. nov. and to the new combination *Palaeobenthesicymus libanensis* that is the oldest record of the family Benthesicymidae. A neotype is herein designated. Detailed comparisons with extant analogues suggest that the crest bearing shrimps inhabited relatively deep water settings most probably exceeding 150 m, at the transition between the lower circalittoral and the upper bathyal zones, under dysphotic or aphotic conditions.

**Key words:** Arthropoda, Crustacea, Decapoda, Lagerstätte, Cretaceous, Santonian, Sahel Alma, Lebanon.

Denis Audo [denis.audo@edu.mnhn.fr] and Sylvain Charbonnier [scharbonnier@mnhn.fr], Muséum national d'Histoire naturelle, Département Histoire de la Terre, CP38, UMR 7207 CNRS, 8 rue Buffon, 75005 Paris, France.

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