

Supplementary material

Table 1

Table 1: List of fossil slipper lobsters (Decapoda: Scyllaridae). Only postlarvae (nisto) and adults are included. Scyllaridae undoubtedly also occur in the fossil record as larvae. These larvae, the phyllosoma stages (Palero *et al.* 2014), are even more common than adults (Carolyn Haug pers. comm. 2017). Unfortunately, the phyllosoma stages have a common morphology in all Achelata Scholtz & Richter, 1995. So it is often difficult, especially on fossil, to know if they correspond to Scyllaridae or to the more abundant Palinuridae Latreille, 1802. Note that *Scyllarella manleyi* Feldmann & Schweitzer, 2017 does not appear in this list because it is herein considered as a more recent synonym of *Llajassus caesis* (Squires, 2001). Indeed, *S. manleyi* holotype corresponds to a specimen which was convincingly ascribed to *Llajassus caesioides* by Nyborg & Garassino (2017).

Additional references for supplementary material

- Böhm, J.** 1922. Arthropoda. Crustacea. Pp. 521–535, pl. 63 in K. Martin (ed.), *Die Fossilien von Java. Sammlungen des Geologischen Reichsmuseums in Leiden, (neue Folge)*, **1**(2). E. J. Brill, Beiden.
- Dames, W.** Ueber einige Crustaceen aus den Kreideablagerungen des Libanon. *Zeitschrift der Deutschen Geologischen Gesellschaft* **38**, 551-575.
- De Angeli, A. & Garassino, A.** 2008. *Pseudosquilla lessinea* n. sp. (Crustacea, Stomatopoda, Pseudosquillidae) and *Scyllarides bolcensis* n. sp. (Crustacea, Decapoda, Scyllaridae) from the lower Eocene (Ypresian) of Monte Postale (Altissimo, Vicenza, NE Italy). *Atti della Società italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano*, **149**(2), 167–178.
- Desmarest, A.-G.** 1822. Les crustacés proprement dits. Pp. 67–142, pls. 5–11 in A. Brongniart & A.-G. Desmarest (eds.), *Histoire naturelle des crustacés fossiles sous les rapports zoologiques et géologiques*. F.-G. Levrault, Paris.

- Fabricius, J. C.** 1775. *Systema Entomologiae, sistens Insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus*. Officina Libraria Kortii, Flensburg and Leipzig.
- Förster, R.** 1984. Bärenkrebse (Crustacea, Decapoda) aus dem Cenoman des Libanon und dem Eozän Italiens. *Mitteilungen der Bayerischen Staatssammlung für Paläontologie und historische Geologie*, **24**, 57–66.
- Garassino, A., Bahrami, A., Yazdi, M. & Vega, F. J.** 2014. Report on decapod crustaceans from the Eocene of Zagros Basin, Iran. *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen*, **274**(1), 43–54. <https://dx.doi.org/10.1127/njgpa/2014/0442>
- Garassino, A. & Schweigert, G.** 2006. *Cretasergestes sahelalmae* n. gen., n. sp. (Crustacea, Decapoda, Sergestoidea) and *Cancrinus libanensis* n. sp. (Crustacea, Decapoda, Palinuroidea) from the Upper Cretaceous (Cenomanian) of Lebanon. *Atti della Società italiana di Scienze naturali e del Museo civico di Storia naturale in Milano*, **147**, 69–78.
- Haug, J. T. & Rudolf, N. R.** 2015. A nisto larva of an Eocene slipper lobster (Neoscyllarida). *Palaeodiversity*, **8**, 113–119.
- Holthuis, L. B.** 1960. Preliminary descriptions of one new genus, twelve new species and three new subspecies of scyllarid lobsters (Crustacea Decapoda Macrura). *Proceedings of the Biological Society of Washington*, **73**, 147–154.
- König, C. D. E.** 1825. *Icones fossilium sectiles*. G. B. Sowerby, London.
- Münster, G. Graf zu** 1839. Decapoda Macroura. Abbildung und Beschreibung der fossilen langschwänzigen Krebse in den Kalkschiefern von Bayern. *Beiträge zur Petrefakten-Kunde*, **2**, 1–88.
- Quayle, W.J.** 1987. English Eocene Crustacea (Lobsters and Stomatopods). *Palaeontology*, **30**(3), 581–612, pls 64–67.
- Rathbun, M. J.** 1935. Fossil Crustacea of the Atlantic and Gulf Coastal Plain. *Special Papers of the Geological Society of America*, **2**(8), 1–160.
- Squires, R. L.** 2001. Additions to the Eocene megafossil fauna of the Lajas Formation, Simi Valley, southern California. *Contributions in Science*, **489**, 1–40.

Woods, H. 1925–1931. *A monograph of the fossil macrurous crustacean of England*. The Palæontographical Society, London.