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THE WASP FAMILY †SERPHITIDAE (HYMENOPTERA) FROM LOWER CRETACEOUS SPANISH AMBERS

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The study of extinct Cretaceous families of Hymenoptera is crucial as it provides unique glimpses into the diversification of the group during a dramatic period in evolutionary history. The †Serphitidae were a family of parasitoid wasps, with representatives distributed worldwide during the Cretaceous, ranging temporally from the Albian through the Campanian. The family is sister to the monogeneric †Archaeoserphitidae, and together with the Mymarommatoidea, they comprise the clade Bipetiolarida, characterized by the bipetiolate metasoma. Currently, the †Serphitidae comprise 21 species in the genera *Microserphites* (†Microserphitinae), *Supraserphites* (†Supraserphitinae), *Serphites*, *Aposerphites*, and *Jubaserphites* (all three within †Serphitinae). Until now, four serphitid species were known from Spanish ambers (Peñacerrada I, El Soplao, and San Just localities). Here, we report seven new specimens from the amber-bearing outcrops of Ariño, El Soplao, and San Just. Those from Ariño correspond to the oldest known serphitid wasps. The amber from this site is found in a dinosaur bonebed dated as early Albian. One specimen belongs to *Aposerphites*, while the other six belong to *Serphites*. Considering the latter, two specimens might be assigned to *S. lamiak* Ortega-Blanco, Delclòs, Peñalver and Engel, 2011, while three seem to represent a new species and another is too poorly preserved. Their study is in progress, so taxonomic determinations might change as more is learned. These specimens increase the known diversity of †Serphitidae during the Early Cretaceous and help to know new information about the palaeobiogeography of the group in Iberia. The palaeobiology of the group is obscure, although a parasitoid life cycle has been previously proposed. The description of new serphitid wasps provides interesting anatomical information that could help to understand their biology and may also shed light on interrelationships of and within the family.

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