



Ibericancriidae, a new dakoticancroid family (Decapoda, Brachyura, Podotremata) from the upper Campanian (Upper Cretaceous) of Spain

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Abstract

A small faunule of crabs from the upper Campanian (Upper Cretaceous) of Valencia, eastern Spain, is described as *Ibericancer sanchoi* **n. gen., n. sp.**, and assigned to a new family, the Ibericancriidae **n. fam.**, which is placed in the Dakoticancroidea Rathbun, 1917, until now known to comprise a single family, Dakoticancridae Rathbun, 1917, restricted to the Upper Cretaceous of North America and northeast Mexico. The Ibericancriidae **n. fam.** shares with the Dakoticancridae the general shape and size of the carapace, the arrangement of dorsal regions of the carapace, a pleural suture situated at carapace flanks, insertion of a sternal thoracic portion between abdomen and coxae of the pereopods, and long P2 and P3. *Ibericancer n. gen.* differs from the four genera currently included in the Dakoticancridae (*Dakoticancer* Rathbun, 1917; *Tetracarcinus* Weller, 1905; *Avitelmessus* Rathbun, 1923 and *Seorsus* Bishop, 1988), in having P4 and P5 conspicuously reduced and subdorsal in position, a narrower thoracic sternum, and distinct frontal and orbital features. Because the male and female gonopores are located on the pereopods, P5 and P3 coxae, respectively, and the spermathecal aperture is at the extremity of the thoracic suture 7/8, the Dakoticancroidea conforms to the Podotremata Guinot, 1977. It is here interpreted as a carcinised podotreme superfamily, the broadening of the thoracic sternum being weak in the Ibericancriidae **n. fam.**, but distinct in the Dakoticancridae. Dakoticancroid crabs probably employed a carrying behaviour, as do most podotremes, and were characterised by an abdominal holding of the press button type. Morphological characters of the Ibericancriidae **n. fam.** add significantly to our knowledge of the evolutionary processes within the Podotremata.

Key words: Carcinisation, Podotremata, Dakoticancroidea, Dakoticancridae, *Dakoticancer*, Ibericancriidae, new family, Upper Cretaceous, Spain

Introduction

Fossil crustacean faunas have proved to be very abundant and diverse along the east coast of Spain, with records from the Jurassic to the Pliocene (Solé & Via 1989). Decapods, however, had not been recorded so far from the central area (province of Valencia), except for a unique Jurassic lobster (see Solé & Via 1989). Despite the fact that the nearby provinces of Alicante and Castellón have been cited as rich in Cretaceous crabs and in Eocene and Miocene decapod assemblages, respectively, only the macruran '*Glyphea serratosai* Dupuy & Revilla, 1956 has been recorded from Jurassic strata at Buñol (Foia de Bunyol, Valencia). *Ibericancer n. gen.* is therefore the first fossil brachyuran to be reported from Valencia.

The new species described here was first collected by the late Fausto Sancho, during the last century. Unfortunately, it has so far not been possible to recover the material collected by Mr. Sancho, which is sup-