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The nomenclatural status of the two “spiny-wristed” fiddler crabs: *Uca spinicarpa* Rathbun, 1900, and *U. hesperiae* Crane, 1975 (Crustacea: Brachyura: Ocypodidae)

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Abstract

A secondary homonymy is documented for *Gelasimus* [= *Uca*] *tetragonon* var. *spinicarpa* Kossmann, 1877 (a species from the Red Sea), and *Uca spinicarpa* Rathbun, 1900 (a species from the Gulf of Mexico). Although Kossmann’s usage of the nomen *spinicarpa* has chronological priority, a reversal of precedence is required by Article 23.9 of the Code since Kossmann’s use has not been applied as a valid name since the original publication in 1877, while Rathbun’s use of the name has been applied over 50 times in the last half century. The species Kossmann was most likely referring to is today known as *Uca hesperiae* Crane, 1975, a name which may be retained in light of the reversal of precedence.

Key words: *Uca vocans* complex, fiddler crabs, taxonomy, Kossmann

Introduction

The spiny-wristed fiddler crab, *Uca spinicarpa* Rathbun, 1900, is endemic to the Gulf of Mexico (Hopkins & Thurman 2010). The name was first introduced by Rathbun as part of a taxonomic key for North American grapsoid crabs, with characters derived from a specimen collected at Galveston, Texas. It was first fully described in her monograph on the grapsoid crabs of America (Rathbun 1918). There has rarely been any confusion or disagreement over the status of this species, and although Crane (1975) treated it as a subspecies of the closely allied *U. speciosa* (Ives, 1891), it has since been restored to specific status (Salmon *et al.* 1979; Barnwell & Thurman 1984). The type specimen is no longer extant, but Bezerra & Coelho (2010) recently redescribed this species in some detail. No other names have been applied to this species, and as its identity is clear, there is no reason at this time for a neotype designation.

Major revisions by Bott (1973) and Crane (1975) resulted in different phylogenetic groupings of *Uca* species, with each author using a different suite of generic (Bott) or subgeneric (Crane) names. Rosenberg (2001) supported recognition of most of Crane’s subgenera, although with many of Bott’s names having priority. Beinlich & von Hagen (2006) proposed a revised system of classification, recognizing some supraspecific taxa and synonymizing others, and this was used as a basis for the slightly modified synthesis used by Ng *et al.* (2008). According to this system the Atlantic species *Uca speciosa* (Ives, 1891) and *Uca spinicarpa* Rathbun, 1900, are both in the subgenus *Leptuca*.

The western calling fiddler crab, *Uca hesperiae* Crane, 1975, is the westernmost of the *Uca vocans* species-complex (*sensu* Crane 1975), viz. *U. borealis* Crane, 1975, *U. dampieri* Crane, 1975, *U. hesperiae* Crane, 1975, *U. neocultrimana* Bott, 1973, *U. vocans* (Linnaeus, 1758), *U. vomeris* McNeill, 1920, and the recently described *U. jocelynae* Shih, Naruse & Ng, 2010. These species are currently placed in the subgenus *Gelasimus* (see Ng *et al.*, 2008). Crane originally treated all of these as subspecies of *U. vocans*, but they have subsequently been given full species status (Rosenberg 2001; Beinlich & von Hagen 2006; Ng *et al.* 2008). With the exception of *U. hesperiae*, all are found predominantly in and around the western Pacific Ocean, with only *U. vocans* extending into the eastern part of the Indian Ocean. *Uca hesperiae* is found throughout the Indian Ocean, ranging from eastern South