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Case 2827

Gebia major capensis Krauss, 1843 (currently *Upogebia capensis*; Crustacea, Decapoda): proposed replacement of neotype, so conserving the usage of *capensis* and also that of *G. africana* Ortmann, 1894 (currently *Upogebia africana*)

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Abstract. The purpose of this application is to conserve the accustomed usage of the specific names of two South African species of prawns: *Upogebia capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894). The latter species is commonly known as the mud-prawn or mud-shrimp. It is proposed to designate a replacement neotype for *capensis* from material of the species as presently understood; the previously designated neotype is a specimen of *africana*.

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1. Three species of *Gebia* Leach, 1815 (p. 342; family UPOGEBIIDAE) were described from South Africa. *Gebia major* var. *capensis* Krauss, 1843 (p. 54) was originally described as a variety of *Gebia major* de Haan, [1841] (pl. 35, fig. 7; text (p. 165) published in [1849]; see Sherborn & Jentink (1895, p. 150) and Holthuis (1953, p. 37) for the dates of publication). The type material from Table Bay is now lost. The original description was short and by modern standards very incomplete and cannot be definitely reconciled with any single species known today. *G. subspinosa* Stimpson, 1860 (p. 22) was described from Simon's Bay; the fate of its type material is unknown. *G. africana* Ortmann, 1894 (p. 22, pl. 2, fig. 4) was described from Port Elizabeth. The holotype of this species is in the Zoological Museum, Strasbourg; it is a male without its abdomen (cephalothorax length 19.5 mm). Although in rather poor condition, it still shows the main characteristics of the species.

2. Since 1910 all three species have been referred to the genus *Upogebia* Leach, [1814] (pp. 386, 400; see Rathbun, 1897, p. 154, footnote for the date of publication). Until 1947 there was confusion between the three taxa and usually only one nominal species, *U. capensis*, was recognised (see, for example, Stebbing, 1900, p. 45; Stebbing, 1910; Balss, 1916, p. 34; Lenz & Strunck, 1914, p. 291; de Man, 1927, pp. 32–34; de Man, 1928, pp. 37, 41, 51). Barnard (1947, pp. 380, 381; 1950, pp. 514–520, fig. 96) revised the South African species of *Upogebia* and concluded that two species were involved: *U. capensis* (Krauss), characterised by a subdistal spine on the upper border of the merus of pereopod 1 and coxal spines on pereopods 1–3, and *U. africana* (Ortmann),

characterised by the absence of these spines. Stimpson's nominal species *Gebia subspinosa* was considered to be a synonym of *U. capensis* as the presence of coxal spines was mentioned in its original description.

3. Barnard's taxonomic arrangement has been generally adopted and at least 15 papers have been published since 1950 using his nomenclature. Besides agreeing on Barnard's morphological definition of the species, several authors have agreed on their ecological and geographical separation which is consistent with their type localities. There are no river outlets in Table Bay, and Krauss's material of *U. capensis* was therefore almost certainly from a marine rather than an estuarine habitat; the species is currently regarded as mainly marine to 80 metres depth, from southwestern and southern Africa between Lüderitz and Mossel Bay (Hill, 1981; Branch & Branch, 1981; Kensley, 1981). *U. africana* is estuarine to 18 metres depth mostly in eastern South Africa between Olifants River and Natal (Siegfried, 1962; Hill, 1977; Branch & Branch, 1981; Kensley, 1981; Hanekom, 1982; Martin & Baird, 1987; Hanekom & Erasmus, 1988; Zoutendyk & Bickerton, 1988). A further six references demonstrate this usage (Schaefer, 1970; Hill & Allanson, 1971; Ngoc-Ho, 1979, 1991; Emmerson, 1983; Atkinson & Taylor, 1988) and this is the usage in general marine biology texts in South Africa.

4. Sakai (1982, p. 44, fig. 9c, pls. A6, D5–6) selected a neotype for *Upogebia capensis* (Krauss, 1843) from material collected from Knysna, eastern South Africa by Hartmann in 1967, and originally identified as *africana* Ortmann, 1894 (see Hartmann-Schröder & Hartmann, 1974, p. 49). The specimen is a male, 55 mm in total length, housed in the Zoologisches Museum, Hamburg (catalogue no. ZMH 30877, selected from material originally registered as ZMH 29852). Sakai considered that *U. africana* was a junior synonym of *U. capensis*, and his selection of a neotype for *capensis* from material commonly assigned to *U. africana* in effect sank the latter name. The name *U. subspinosa* was revived by Sakai for what has been commonly called *U. capensis*, and the latter name was applied to *U. africana* (as defined by the holotype and as generally understood).

5. Sakai's (1982) selection of a neotype for *Upogebia capensis* has been ignored, probably not deliberately, by 10 authors in seven ecological papers since 1982 (see para. 3 above) and followed by only one (Holthuis, 1991, p. 233), who noted the unfortunate consequence that the name *capensis* has been transferred from one species to the other. The neotype upsets the nomenclature generally adopted since Barnard's (1947) and (1950) papers, and it came from material collected at the Knysna estuary (G. Hartmann, personal communication) which is not only far from Table Bay but is ecologically different and outside the geographical range of *Upogebia capensis* as generally understood (see Kensley, 1981, p. 31). In order to preserve the current usage of *Upogebia capensis* we propose that Sakai's (1982) neotype should be set aside and a replacement selected from material corresponding to the *U. capensis* of authors, collected in a marine environment, within the accepted geographical range and as close as practicable to the original type locality. The proposed replacement neotype, specimen no. 14895 in the South African Museum, Cape Town, was determined by K.H. Barnard as an ovigerous female with carapace length 22 mm and total length 65 mm; it is from Saldanha Bay, South Africa.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside the neotype designation of Sakai (1982) for *Gebia major capensis* Krauss, 1843 and to designate in its place specimen no.

14895 in the South African Museum, for which the data are given in para. 5 above;

(2) to place the following names on the Official List of Specific Names in Zoology:
   (a) *capensis* Krauss, 1843, as published in the trinomen *Gebia major* var. *capensis* and as defined by the neotype designated in (1) above;
   (b) *africana* Ortmann, 1894, as published in the binomen *Gebia africana*.

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