ZOOTAXA

1995

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Magnolia Press
Auckland, New Zealand

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(*Zootaxa* 1995)

75 pp.; 30 cm.

4 Feb. 2009

ISBN 978-1-86977-319-9 (paperback)

ISBN 978-1-86977-320-5 (Online edition)

FIRST PUBLISHED IN 2009 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

http://www.mapress.com/zootaxa/

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Zootaxa 1995: 1–75 (2009)
www.mapress.com/zootaxa/

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Accepted by S. Ahyong: 7 Nov. 2008; published:4 Feb. 2009

Abstract

Caridina africana Kingsley, 1882 and *C. togoensis* Hilgendorf, 1893 are redescribed. The distribution of *C. africana* is restricted to Zululand, its type locality and the adjacent area, while the distribution of *C. togoensis* is extended to new localities on the African continent. The subspecies, *C. africana natalensis* Bouvier, 1925 and *C. africana* var. *roubaudi* Bouvier, 1925, are redescribed and given species status. Fourteen new African species are described from specimens previously identified as *C. africana, C. nilotica, C.* near *nilotica* and *Caridina* sp. in various museum collections. These new species are described, illustrated and a key is provided to facilitate identification.

Key words: Crustacea, Atyidae, *Caridina, Caridina africana, C. togoensis, C. natalensis* comb. nov., *C. roubaudi* comb. nov., redescriptions, new species

Introduction

African *Caridina* H. Milne Edwards, 1837, is a difficult and challenging Atyidae taxon because the species assigned to this group are highly variable, with many overlapping characters such as the armature of the rostrum. The taxonomy has been confused further by the creation of numerous subspecies, varities and forms. Moreover, a number of species has been described without the authors examining type material of closely related taxa. In addition, *C. africana* Kingsley, 1882, described originally from Zululand, South Africa has now been reported from a number of other African localities suggesting that it is widely distributed. In fact some authors have considered *C. togoensis* Hilgendorf, 1893 from West Africa to be a synonym of *C. africana*. In reality, however, it is *C. togoensis* that has a wide distribution across Africa while *C. africana* has a restricted range within South Africa. In addition, Woltereck (1984), while describing *C. moeri*, used the Following three names, *C. africana* sub sp. *nigerdeltae*, *C. africana* forma *longa* and *C. africana* forma *brevis* without a proper indication (the whereabouts of this material could not be confirmed). Later she planned to fully describe these species, but sadly passed away before completeting her second revision. All three names are now considered to be *nomina nuda*.

The purpose of this present study is to re-examine the type material of *C. africana* and *C. togoensis*, and to establish the relationship between the two species and the status of the different varieties, forms and subspecies described for the two species. Two 'formes' of *C. africana* described by Bouvier (1925), namely *C. africana natalensis* and *C. africana roubaudi*, are examined, redesribed and given species status. Fourteen new species related to the *C. africana* and *C. togoensis* complex are described, illustrated and their diagnostic characters discussed. An identification key to eighteen species is provided.

Material and methods

Measurements. Total length: adults were measured from the anterior tip of the rostrum to the posterior margin of the telson. Carapace length: measured from the post-orbital margin to the posterior margin of the carapace. Rostrum length: measured from post-orbital margin to tip. Measurements of the palm of first and second pereiopods were taken along the dorsal margin of the propodus. The length of the dactylus of third and fifth pereiopod did not include the terminal spine.

Terms. Rostral formula in this study is modified to save additional use of lines and is cited for example as (3–4) 11–20 + 1/9–17. In this instant (3–4) = post-obital teeth; 11–20 = teeth on dorsal margin of rostrum including the post-orbibtal teeth; +1 = tooth present on unarmed distal dorsal margin; /9–17 = teeth on ventral margin of rostrum. The moveable finger of the first and second pereiopods is refered to as the dactylus.

Abbreviations. Museums: AM, Albany Museum, Grahamstown, South Africa; ANSP, The Academy of Natural Sciences, Philadelphia, USA; MNHN, Muséum national d'Histoire naturelle, Paris, France; NHM,