



Review and three new species of the flat bug genus *Neochelonoderus* Hoberlandt, 1967 from East Africa (Hemiptera: Heteroptera: Aradidae)

ERNST HEISS^{1,3} & VASILY GREBENNIKOV²

¹Tiroler Landesmuseum, Josef-Schraffl-Strasse 2a, A-6020 Innsbruck, Austria. E-mail: aradus@aon.at

²Ottawa Plant Laboratory, Canadian Food Inspection Agency, K.W. Neatby Bldg., 960 Carling Avenue, Ottawa, Ontario, K1A 0C6, Canada. E-mail: Vasily.Grebennikov@inspection.gc.ca

³Corresponding author

Abstract

The apterous East African Mezirinae flat bug genus *Neochelonoderus* Hoberlandt 1967 is revised. In addition to known species from Burundi (*N. basilewskyi*) and Democratic Republic of the Congo (*N. straeleni*), two new species from Tanzania (*N. talaus* n. sp. and *N. areius* n. sp.) and one from Zambia (*N. hoberlandti* n. sp.) are described and illustrated. A key to the species of *Neochelonoderus* is presented.

Key words: Hemiptera, Heteroptera, Aradidae, Mezirinae, *Neochelonoderus*, aptery, new species, Tanzania, Zambia, Burundi, DRC

Introduction

Hoberlandt (1956) described *Chelonoderus basilewskyi* based on a single male from Usumbura (renamed Bujumbura since 1962) in Urundi (now Burundi). The specimen has peculiar substylate eyes, long anteriorly protruding genae and a significant fusion of thoracic and abdominal structures. Since the type species of this genus is endemic to Australia, Usinger & Matsuda (1959: 250) questioned the monophyly of this taxon. Hoberlandt (1967), therefore, erected a new genus *Neochelonoderus* with *basilewskyi* as the type species and described *N. straeleni* from a single female from Upemba National Park in the southeast part of the Democratic Republic of the Congo (DRC). Specimens of two new *Neochelonoderus* species were recently found from sifted lowland forest leaf litter in eastern Tanzania. Also, an additional new species was recorded from Zambia. The goal of the present paper is to revise the genus, describe three new species, and provide an identification key to all of the included species. In order to adopt the generic description for all five species now included in this genus and to avoid repeated statements of common characters for each species, a redescription is also given.

Material and methods

Acronyms for collections mentioned in the text:

CEHI Ernst Heiss Collection, Tiroler Landesmuseum, Innsbruck, Austria;
CNC Canadian National Collection of Insect, Arachnids and Nematodes, Ottawa, Canada;
MRAC Musée Royal de l'Afrique Centrale, Tervuren, Belgium.

Tanzanian *Neochelonoderus* specimens collected in 2012–13 were genetically barcoded with the cytochrome oxidase I (COI) gene. Results and phylogenetic interpretation will be presented later in the context of other barcoded Tanzanian Aradidae, when more data are available.

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