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Article



New taxa and systematic assignments of Madagascan Aradidae (Hemiptera: Heteroptera)

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Abstract

In this paper the flat bug genera Jarmilaia Hoberlandt 1957 and Bergrothista Kiritshenko 1959, recorded from Madagascar, are revised. As both genera share distinct metathoracic scent gland canals, a basic character for the classification for the subfamily Mezirinae, these genera, to date treated as Carventinae, are transferred to Mezirinae. Two new species of Jarmilaia, rabitschi **n. sp.** and zetteli **n. sp.**, and two species of Bergrothista, maculipennis **n. sp.** and andasibensis **n. sp.**, are recognized and described. For Bergrothista mollis (Hoberlandt 1957) the new genus Parabergrothista **n. gen.** is erected and a new species *P. secunda* described and also placed in Mezirinae. A new genus Neobergrothista **n. gen.** with the species *N. rotundiventris* **n. sp.** belongs also to Mezirinae. All taxa are illustrated by colour photographs.

Key words: Hemiptera, Heteroptera, Aradidae, Mezirinae, Carventinae, new genera, new species, Madagascar

Introduction

Since the basic comprehensive studies by Hoberlandt (1957, 1959) and Kiritshenko (1959), only few additional papers dealing with Madagascan Aradidae have been published by Kormilev (1960,1974) and more recently by Heiss (1997, 1998, 1999, 2006a, 2006b, 2008, 2009), where several new taxa were described.

Material collected by the author in 1995 and 2000, as well as additional specimens presented for study, were recently examined and compared with Hoberlandt's types.

As a result the genera *Jarmilaia* Hoberlandt 1957 and *Bergrothista* Kiritshenko 1959, which were both assigned to the subfamily Carventinae by these authors and later followed by Kormilev & Froeschner (1987), are now transferred to Mezirinae, because they share distinct metathoracic scent gland canals. They are redefined and two new genera described.

Bergrothista mollis (Hoberlandt 1957) is the type species of the new genus *Parabergrothista* **n. gen.**, also belonging to Mezirinae; a new species belonging to this genus is described.

Furthermore *Neobergrothista* **n. gen.** is erected for *N. rotundiventris* **n. sp.** which is strikingly different from all Mezirinae genera known from Madagascar.

All treated species are macropterous and, as known so far, are endemic to Madagascar.

Material and Methods

The material upon this study is based is held in the collection of the author. The mostly incrustate specimens were cleaned for the study of body structures.

Photos were taken through an Olympus SZX 10 binocular microscope with Olympus E 3 digital camera and processed with Helicon Focus 4.3 software and using Adobe Photoshop and Lightroom 2.3.

Measurements were taken with a micrometer eyepiece, 20 units = 1 mm.

When citing the text on the labels of a pin attached to the specimens / separates the lines and // different labels. Abbreviations used: deltg = dorsal external laterotergite (connexivum), mtg = mediotergite, vltg = ventral laterotergite, pe-angle = posteroexterior angle (of deltg).