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New genera and species of Carventinae from New Caledonia (Hemiptera: Heteroptera: Aradidae)

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Abstract

Only a few taxa of Aradidae were described from the Pacific island of New Caledonia to date. Based on recently collected material, 3 new genera (*Kanakaptera* **n. gen.**, *Rugicarventus* **n. gen.**, and *Paracaraptera* **n. gen.**) and 7 new species (*Kanakaptera laticeps* **n. sp.**, *K. montdoa* **n. sp.**, *K. heimiana* **n. sp.**, *K. carininota* **n. sp.**; *Rugicarventus pygmaeus* **n. sp.**; *Paracaraptera schuhiana* **n. sp.**, and *Nesiaptera picea* **n. sp.**) are described in this paper. All species are illustrated by colour photographs and a key is provided for the species of *Kanakaptera* **n. gen.**

Key words: Hemiptera, Heteroptera, Aradidae, Carventinae, new genus, new species, New Caledonia

Introduction

The fauna of the flat bug family Aradidae from New Caledonia is still insufficiently known, and only 22 species belonging to 13 genera are recorded from there to date. Of these 4 endemic genera (*Phloeobia* Montrouzier 1865, *Gnostocoris* Kormilev 1967, *Pelecoris* Kormilev 1971a, *Kaulocoris* Kormilev 1971b) and 20 species were described on specimens from New Caledonia. Further, 2 species (*Artabanus sinuatus* Stal 1873, *Brachyrhynchus micronesicus* (Esaki & Matsuda 1951)) are widely distributed, but after Kormilev (1971a), they also occur in New Caledonia.

Already in 1858 Montrouzier described the first aradid from New Caledonia (*Aradus dichroa*) and added (1861) two more species (*Mezira minima, Ctenoneurus lifuanus*) and another in 1865 (*Phloeobia sayi*). It was more than a century later that Kormilev (1967) described a new genus and 3 new species from there (*Gnostocoris gressitti, Calisius granuliger, Calisius pusillus*) and in 1968 *Arbanatus brunneus*. While revising the very rich material from the Pacific area housed in the collections of the Bishop Museum, Honolulu, Hawaii, the same author described in two important papers (1971a, 1971b) 11 new taxa from New Caledonia. No additional species were described since.

Now additional material available for study containing 3 new genera and 7 new species are described below. This raises the number of recorded Aradidae from New Caledonia to 16 genera and 29 species – still much less than what can be expected.

Material and methods

The material upon this study is based is held in the collection of the author unless otherwise indicated. 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 for *Kanakaptera* n.gen. and 40 units = 1 mm for *Rugicarventus* n.gen., *Paracaraptera* n.gen., and *Nesiaptera*..