



The first Carventinae species in Miocene Dominican Amber (Hemiptera: Heteroptera: Aradidae)

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Abstract

The flat bug family Aradidae is represented to date in Dominican Amber only by two species: *Calisiopsis brodzinskyorum* Froeschner, 1992 and *Mezira scheveni* Heiss, 2000 belonging to the subfamilies Calisiinae and Mezirinae respectively. Now two fossil species sharing the characters of the extant genera *Nesoproxius* Usinger & Matsuda, 1959 (*N. latocanus* **n.sp.**) and *Carventus* Stål, 1865 (*C. bechlyi* **n.sp.**), and one tentatively assigned to *Acaricoris* Harris & Drake, 1944 (*A. robertae* **n.sp.**), are described and illustrated below. Another specimen cannot be placed into an extant genus, and *Proneoproxius* **n.gen.** is proposed to accommodate *P. cornutus* **n.sp.**

Key words: Hemiptera, Heteroptera, Aradidae, Carventinae, Miocene, Dominican Amber, new genus, new species

Introduction

The rich deposits of Miocene Dominican Amber contain a wealth of plant and animal inclusions (Poinar & Poinar, 1999) of which the insect fauna in particular demonstrates a high level of diversity and endemism (Arillo & Ortuño 2005).

Only two species of flat bugs or Aradidae belonging to the extant genera *Calisiopsis* (*C. brodzinskyorum* Froeschner, 1992) and *Mezira* (*M. scheveni* Heiss, 2000) have been recorded from this deposit. Recently examined material contains a new genus and 4 new species, which are described and illustrated below.

Comparison with extant taxa can be very difficult, since impurities or the sombre color of the amber can obscure essential structures. Therefore the assignment of single specimens to an extant genus is in some cases tentative unless further material allows a more detailed examination and comparison.

Material and methods

The Amber inclusions in this study are deposited in the collection of the second author, George O. Poinar Jr., Oregon State University, Corvallis, USA (CGPC) and the Staatliches Museum für Naturkunde, Stuttgart, Germany (G.Bechly, SMSG).

Photos were taken with a reflex camera and a digital camera Nikon Coolpix P 300.

Measurements were taken with a micrometer eyepiece, 40 units = one mm.

Abbreviations used: delgt = dorsal external laterotergite (connexivum), mtg = mediotergite, ptg = paratergite.