

Description of a further species of *Ragas* WALKER (Diptera: Empididae) from Baltic amber (Tertiary, Eocene)

[Beschreibung einer weiteren Art von *Ragas* WALKER (Diptera: Empididae) aus dem Baltischen Bernstein (Tertiär, Eozän)]

by

Christel HOFFEINS, Bradley J. SINCLAIR and Andreas STARK

Hamburg (Germany)

Ottawa (Canada)

Halle an der Saale (Germany)

Abstract

A new species of *Ragas* WALKER, 1837 (Empididae) – *R. bizarra* spec. nov. – from Eocene Baltic amber is described and illustrated, based on a single female. This species is unique in having a beak-like extension of the gena. A key to *Ragas* species from Baltic amber is given.

Key words

Empididae, *Ragas*, Baltic amber, Tertiary, Eocene, new species, key

Zusammenfassung

Eine weitere neue Art aus der Gattung *Ragas* WALKER, 1837 (Empididae) – *R. bizarra* spec. nov. – wird, basierend auf einem weiblichen Exemplar, beschrieben und abgebildet. Diese besondere Art zeichnet sich durch eine schnabelartige Verlängerung der Gena aus. Für die *Ragas*-Arten des Baltischen Bernsteins wird ein Bestimmungsschlüssel gegeben.

Stichwörter

Empididae, *Ragas*, Baltischer Bernstein, Tertiär, Eozän, neue Art, Bestimmungsschlüssel

Introduction

The genus *Ragas* WALKER, 1837 (Diptera: Empididae) comprises six extant species, recorded from the Nearctic and Palaearctic regions (SINCLAIR & SAIGUSA 2001). In addition, five fossil species have been described from Baltic amber (*R. baltica* SINCLAIR & HOFFEINS, *R. electrica* SINCLAIR & HOFFEINS, *R. eocaenica* SINCLAIR & HOFFEINS, *R. succinea* SINCLAIR & HOFFEINS and *R. ulrichi* SINCLAIR & HOFFEINS) based on 19 specimens from two private collections (SINCLAIR & HOFFEINS 2013). Shortly after the latter publication four additional specimens were discovered of which three were identified as males of *R. ulrichi*. The other inclusion is a female specimen with atypical characters and represents a new species that is described herein. The genus *Ragas* WALKER is defined by short spine-like setae on the postgena, fore coxa and trochanter, a recurved labrum, and subapical laterally projecting surstyli in males (SINCLAIR & SAIGUSA 2001).

Material and Methods

The amber piece was prepared and embedded in polyester resin as described in SINCLAIR & HOFFEINS (2013). Digital images were taken using an Olympus SZH D. F. plano 2 ×-objective with an Olympus E5 camera mounted on an Olympus SZH 10 stereomicroscope. Images were stacked with Helicon Focus software. The terminology follows McALPINE (1981), STUCKENBERG (1999) [antennae] and SAIGUSA (2006) [wing venation]. The inclusion will be deposited as part of the amber collection of the Senckenberg Deutsches Entomologisches Institut (SDEI), Müncheberg, Germany.