Three new species of the genus Acerocnema Becker (Diptera: Scathophagidae) from Japan, with a key to the Palaearctic species

[Drei neue Arten aus der Gattung *Acerocnema* Becker (Diptera: Scathophagidae) aus Japan, mit einem Bestimmungsschlüssel für die paläarktischen Arten]

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Abstract

Three new species of the genus *Acerocnema* BECKER, 1894 are described from Japan: *A. kishimotoae* spec. nov., *A. flavifrons* spec. nov. and *A. sinuata* spec. nov. *Acerocnema* is redefined, and a key to the Palaearctic species is provided.

Key words

Scathophagidae, Acerocnema, Palaearctic Region, Japan, new species, key

Zusammenfassung

Drei neue Arten der Gattung Acerocnema BECKER, 1894 werden aus Japan beschrieben: A. kishimotoae spec. nov., A. flavifrons spec. nov. und A. sinuata spec. nov. Acerocnema wird neu definiert und ein Bestimmungsschlüssel für die paläarktischen Arten wird geliefert.

Stichwörter

Scathophagidae, Acerocnema, paläarktische Region, Japan, neue Arten, Bestimmungsschlüssel

Introduction

The genus *Acerocnema* is a small genus and is distributed in the Holarctic Region (Gorodkov 1986, Vockeroth 1987, Jong 2000). This genus was established by Becker (1894), and it is characterized by its small body size and by having an arista that is no longer than the maximum length of the postpedicel. The biology of these flies is unknown, but adults of some species are found on flowers of the genus *Corydalis* in early spring and they oviposit in the pod (Devillers 2012). The Palaearctic species of this genus have been studied by Meigen (1826), Zetterstedt (1846), Becker (1894), Sack (1937), Stackelberg (1952), Ozerov (2006, 2013), and 7 species are now recognized. In the Nearctic region, two species are now known to occur (Curran 1927; Vockeroth 1965, 1987). However, there has been no information on the genus in eastern Asia, including Japan, and no redefinition of the genus has been made since Sack (1937).

Recently, I was able to obtain some small scathophagid species from Hokkaido, Japan. These apparently belong to the genus *Acerocnema*, and they differ from all previously described species of the genus. In the present paper, I describe them as new to science and present a definition of the genus and a key to the Palaearctic species of *Acerocnema*.

Materials and methods

All specimens were collected by sweep net, and they were pinned and observed under a stereomicroscope. The male and female terminalia were studied after maceration in 10 % KOH. The holotypes and paratypes