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Natural blondes: New species of brilliantly yellow-colored and morphologically distinct *Megaselia* (Diptera: Phoridae) from Central America

[Naturblondinen: Neue Arten von leuchtend-gelben und morphologisch eigenständigen *Megaselia* (Diptera: Phoridae) aus Mittelamerika]

by

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Abstract

Five elongate, dorso-ventrally flattened species of brilliant yellow *Megaselia* with characteristically shaped genitalia have been discovered from Costa Rica and Nicaragua. This species group is morphologically distinct and all included species are determined to be new to science. Five species in this group (all named for beautiful blonde women) are herein described: *Megaselia brigitteae* spec. nov., *M. jeanae* spec. nov., *M. marilynae* spec. nov., *M. meganae* spec. nov., and *M. twiggyae* spec. nov. A key to this unique species group is given.

Key words

Phoridae, *Megaselia*, Neotropical Region, Costa Rica, Nicaragua, tropical diversity, tropical forests, taxonomy, new species, key

Zusammenfassung

Fünf langgestreckte, dorsoventral abgeflachte Arten leuchtend-gelber *Megaselia* mit charakteristisch geformten Genitalien wurden in Costa Rica und Nicaragua entdeckt. Diese Artengruppe ist morphologisch eigenständig und alle hier eingeschlossenen Arten sind neu für die Wissenschaft. Fünf Arten dieser Gruppe (alle nach schönen Blondinen benannt) werden beschrieben: *Megaselia brigitteae* spec. nov., *M. jeanae* spec. nov., *M. marilynae* spec. nov., *M. meganae* spec. nov. und *M. twiggyae* spec. nov. Ein Bestimmungsschlüssel für diese einzigartige Artengruppe wird vorgelegt.

Stichwörter

Phoridae, *Megaselia*, neotropische Region, Costa Rica, Nicaragua, tropische Diversität, tropische Wälder, Taxonomie, neue Arten, Bestimmungsschlüssel

Introduction

The genus *Megaselia* Rondani, 1856 (Diptera: Phoridae) is so abundant and diverse that one might spend a lifetime of study on this group and still be surprised and intrigued on a daily basis. Recently, in Malaise trap samples from Zurquí de Moravia (San José, Costa Rica), the authors found an abundance of brilliant, bright lemon-yellow specimens among the many dingy brown and straw-yellow phorids they were sorting. Upon closer examination, it was realized that what had superficially appeared to be one species was actually three distinct species (as is often the case with *Megaselia*). Examination of further Central American specimens revealed two additional species in this group from sites in Nicaragua. Remarkably, species have been collected from both high altitude cloud forests at 1600 m, and lowland river valleys at 100 m.

In our attempts to continue to whittle away at the numerous New World *Megaselia* to be described, we here offer this unique species group as a small, but readily-identifiable subset of the genus. We hope that future work might reveal additional species in this group, and with additional collection data we might be able to discern more about this unique group's evolution and distribution.

