Seven new species of Canthochilum Chapin from Hispaniola (Coleoptera: Scarabaeidae: Scarabaeinae)

T. KEITH PHILIPS & MICHAEL A. IVIE

1Department of Biology, Western Kentucky University, Bowling Green, KY 42101. E-mail: keith.philips@wku.edu
2Department of Entomology, Montana State University, Bozeman, MT 59717. E-mail: mivie@montana.edu

Abstract

Seven new species, Canthochilum brodzinskyorum NEW SPECIES, Canthochilum magnum NEW SPECIES, Canthochilum matthewsi NEW SPECIES, Canthochilum mimicum NEW SPECIES, Canthochilum nebulonemi NEW SPECIES, Canthochilum platycnemis NEW SPECIES, and Canthochilum xericum NEW SPECIES, are described from Hispaniola. New distribution records are given for C. cibony Matthews and C. darlingtoni Matthews in the Dominican Republic.

Key words: Scarabaeinae, dung beetles, West Indies, Greater Antilles, new species

Resumen


Introduction

Canthochilum Chapin is a Greater Antillean endemic genus of small to very small scarabaeines (2.3–6.0 mm) found in forested habitats across a wide variety of moisture and elevational gradients. Chapin (1934) proposed the genus Canthochilum for two new species from Puerto Rico and a third previously described species from Cuba. He added a fourth species a year later (Chapin 1935). In a series of papers in the 1960s (Matthews 1965, 1966, 1969; Zayas & Matthews 1966) Matthews and his coauthor added 12 more species, one of which, Canthochilum sp. (Matthews 1969), remained unnamed because it was represented by only a partial singleton. These species are distributed on Cuba (8 species), Hispaniola (3 species) and Puerto Rico (5 species).

In a situation similar to that of Canthonella (Ivie & Philips 1990, 2008), the number of species on Hispaniola has proven to be greatly under-reported. The results of numerous expeditions to remote areas of that large and mountainous island in the last 20 years, using new techniques, especially the flight intercept trap, have provided us with a number of undescribed species of Canthochilum. It seems that each new mountain range sampled yields 1 or more new species of this genus. We take this opportunity to describe the 7 additional species so far discovered, bring the total number of Canthochilum species to 23, with 10 of those on Hispaniola. Matthews’ enigmatic unnamed species from Etang Lachaux, Haiti, is not among these, still awaiting rediscov-