Notes on the taxonomic identity of Bystus hirtulus (Kirsch) and transfer from Endomychidae to Coccinellidae (Coleoptera: Cucujoida), with designation of a lectotype for Alexia hirtula Kirsch

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Abstract

During an examination of type material of the New World endomychid genus Bystus Guérin-Méneville (Anamorphinae), the type series of Alexia hirtula Kirsch from Peru was found to contain a mixture of different taxa, none of which belong to the genus Bystus, the subfamily Anamorphinae, or even the family Endomychidae. Alexia hirtula is transferred to Delphastus Casey (Coccinellidae: Microweiseinae: Serangiini), establishing the new combination, Delphastus hirtulus (Kirsch), and a lectotype is designated. Of the three paralectotypes, one appears to be conspecific with the lectotype, one is identified as an undescribed species of Microscymnus Champion (Coccinellidae: Cryptognathini), and one, a partial specimen lacking the head, pronotum, and one elytron, is identified as a species of Leiodidae in the tribe Scotocryptini, probably Aglyptinus Cockerell. A diagnosis and redescription of D. hirtulus is provided, and Gordon’s (1994) key to Delphastus is modified to accommodate the newly transferred species. The historical classification of D. hirtulus is discussed along with characters justifying its revised placement.

Key words: Coleoptera, Endomychidae, Coccinellidae, Anamorphinae, Microweiseinae, Cryptognathini, new combinations

Introduction

Kirsch (1876) described Alexia hirtula from a short series of specimens from Peru and placed it as the last entry under the family heading Coccinellidae. Throughout much of its tumultuous taxonomic history, the genus Alexia Stephens served as a general dumping ground for any small, hirsute coccinelloid beetle species. Alexia was variously classified in Erotylidae (using the vernacular name Erotylenae) (Kiesenwetter & Schaum 1849), incertae sedis (Dohrn 1856), Coccinellidae (Stein 1868; Kirsch 1876), or Endomychidae (Stein & Weise 1877; Heyden et al. 1883, 1906). Presently, Alexia is treated as a junior synonym of Sphaerosoma Samouelle in the monotypic family Alexiidae (Lawrence 1991; Lawrence and Newton 1995), a group known only from the Palearctic. However, long before all these changes took place, Kirsch’s A. hirtula was shifted to other genera.

In his Catalogus Endomychidarum, Csiki (1901) transferred Alexia hirtula to the endomychid genus Rhymbus Gerstaecker, but expressed some uncertainty regarding its placement by preceding his entry with a “?” . In his follow-up catalog (Csiki 1910), he maintained the species within Rhymbus, choosing only to modify the specific epithet to agree in gender with that genus. Strohecker (1953) synonymized Rhymbus with Bystus Guerin-Meneville, never questioning the inclusion of Bystus hirtulus among the new combinations. Apparently Strohecker did not examine the type series of B. hirtulus, as they differ conspicuously from known Bystus species by their shiny reflective cuticular surfaces, more elongated forms, short concealed antennae, and lack of pronotal sulci.

While preparing a taxonomic revision of the genus Bystus (Shockley 2009), the first author (FWS) had the opportunity to borrow and examine Kirsch’s type series of Alexia hirtula from the Museum für Tierkunde, Staatliche Naturhistorische Sammlungen Dresden (SMTD). The series consists of four minute, highly polished beetles all