



<http://dx.doi.org/10.11646/zootaxa.3878.2.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:A8D497DD-1030-4168-BF0B-D30819410BB4>

Description of *Dirrhagofarsus ernae* n. sp. with a key to the known *Dirrhagofarsus* species (Coleoptera: Eucnemidae)

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Abstract

The adult and the larva of *Dirrhagofarsus ernae* n. sp. are described from the Eastern United States. The genus *Dirrhagofarsus* is diagnosed and a key to all known species of the genus is provided.

Key words: Coleoptera, Eucnemidae, *Dirrhagofarsus ernae*

Introduction

Dirrhagofarsus lewisi (Fleutiaux 1900) was found in the United States for the first time in the early 1970s (Ford & Spilman, 1979; Muona, 2000). Originally described from Japan, this species has since spread from Georgia to SE Wisconsin. Unexpectedly, another species of this genus has appeared in the region, first in Richmond, Virginia, then Pennsylvania and Ohio and most recently in New Hampshire, Missouri, Wisconsin and Alabama. *Dirrhagofarsus* is one of the many eucnemid genera described as monotypic, but it actually includes many species hiding under other generic assemblages. Muona (1993) placed three species in the then Palaearctic genus *Dirrhagofarsus* Fleutiaux. In addition to the type species, *Microrhagus lewisi* Fleutiaux, both *Microrhagus modestus* Fleutiaux 1923 and *Hypocaelus attenuatus* Mäklin 1845 were included. In his 2000 key, Muona chose to differentiate *Dirrhagofarsus* on the basis of the protruding elytral apex, which characterized the only known Nearctic species, *D. lewisi*. Later Muona (2002) relied on the lateral frontal keels as the main external character, these being present in all the known species. The new species described herein is correctly placed with the latter key; employing the former one it would be placed in *Golbachia*. In order to facilitate the identification of the species, *Dirrhagofarsus* is herein characterized in more detail, partly on the basis of phylogenetic analyses of all Dirrhagini genera (Muona, 1993; Alaruikka & Muona, 2004, in prep). The sudden appearance of this species in the US suggests that it has been introduced from abroad. Two very closely related species have been described from the Palaearctic region. Two further undescribed species are known to JM from the Asian coastal regions of the Pacific. It is quite likely that *Dirrhagofarsus ernae* is in reality a formerly unknown Asian species that has been introduced to North America.

Dirrhagofarsus Fleutiaux, 1935

Type-species: *Microrhagus lewisi* Fleutiaux.

(= *Attenuorhagus* Olexa, 1975. Type-species *Hypocaelus attenuatus* Mäklin)

Diagnosis. (Tribe Dirrhagini) Head with transverse belt of microcombs on vertex, lateral keels on frons, deep sensory pits on front margin of large eyes, interrupted lateral pronotal keels, well-developed notosternal antennal grooves with cranially obliterated median ridge, simple male protarsomere 1, metacoxal plates abruptly narrowing

Acknowledgements

We would like to thank Eric Eaton, Nicolas Gompel, Richard Hoffman, Steve Krauth, Ted MacRae, Darren Pollock, Mike Thomas, Michael Ulyschén and Dan Young for providing specimens for our studies.

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