Zootaxa 4052 (3): 345–358
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.4052.3.4
http://zoobank.org/urn:lsid:zoobank.org:pub:E746140C-2239-4425-9007-31AC036D852C

Taxonomy of the *Proisotoma* complex. V. Sexually dimorphic *Ephemerotoma* gen. nov. (Collembola: Isotomidae)

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Abstract

A new genus is proposed based on a new species from Iran, *Ephemerotoma skarzynskii* **gen. et sp. nov.,** and three known species: *E. huadongensis* (Chen, 1985) **comb. nov.**, *E. multituberculata* (Martynova, 1971) **comb. nov.** and *E. porcella* (Ellis, 1976) **comb. nov.** The genus shares the characters of *Subisotoma* Stach and *Proctostephanus* Börner and is distributed in southern areas of Eurasia (Eastern Mediterranean, Iran, Tajikistan, China). *Ephemerotoma* **gen. nov.** belongs to the *Proisotoma*-complex and is characterized by a simple maxillary palp, only 4 guards on labial papilla E and 2 prelabral chaetae. Four s-chaetae on Abd.V are arranged in two rows, two anterior and two posterior chaetae. All members of *Ephemerotoma* **gen. nov.** are redescribed or discussed based on type or fresh material, and a key to species of the genus is given. *Scutisotoma potapovi* Xie & Chen, 2008 is considered a synonym of *E. huadongensis*, while *Proisotoma anopolitana* is moved to the genus *Proctostephanus*. Sexual dimorphism is described for three species.

Key words: Anurophorinae, sexual dimorphism, swarming, Asia

Introduction

One of the most spectacular and enigmatic species of Isotomidae in the Mediterranean region, *Dimorphotoma porcella,* was described by Ellis (1976). It was recorded once and in enormous numbers. Ellis thought that it was "better not to create a new genus for *porcella* at present" and therefore the new species was considered to be in the genus *Dimorphotoma*, but monophyly of *Dimorphotoma porcella* and *D. muriphila* remained in doubt for the author. The latter species is also a dimorphic form but has been moved to the genus *Scutisotoma*, which makes the position of *porcella* even less clear (Potapov *et al.* 2006). Having additional material of the *Proisotoma* complex similar to *D. porcella*, we are describing a new genus to accommodate them.

The paper is based on the material deposited in the Islamic Azad University in Kermanshah (Iran), Moscow State Pedagogical University (Russia) and Museum National d'Histoire Naturelle (France, Paris).

Abbreviations: Abd.—abdominal segments; Ant.—antennal segments; AO—antennal organ; *bms*—basal microsens on antennal segments; B-row of chaetae—the second chaetal whorl on tibiotarsi; *e*-guards—supplementary chaetae for E-papilla of labium; G and H—ocelli G and H; IAU—Islamic Azad University in Kermanshah; MNHN—National Museum of Natural History in Paris; microsens in the text or *ms* in the text and figures—micro *s*-chaeta(e) (=microsensillum(a) auct.); macrosens or sens in the text or *s* in the text and figures—macro *s*-chaeta or *s*-chaetae (=macrosensillum(a) or sensillum(a) auct.); MSPU—Moscow State Pedagogical University; *msp*—males spurs, erect short chaetae present on antennae in males; *p*-row of chaetae—chaetae of posterior row; PAO—postantennal organ; *s*—*s*-chaeta(e); t.ch.—tenent chaetae of tibiotarsi; Th.—thoracic segments; Ti.—tibiotarsi of legs; U3—outer edge of unguis of leg 3.

Accepted by W.M. Weiner: 5 Oct. 2015; published: 3 Dec. 2015