



Taxonomy of the *Proisotoma* complex. II. A revision of the genus *Subisotoma* and a description of *Isotopenola* gen. nov. (Collembola: Isotomidae)

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Abstract

A taxonomic revision of the genus *Subisotoma* Stach, 1947 is presented. *Subisotoma pusilla* (Schäffer, 1900), *S. tenuis* (Dunger, 1982), and *S. asiatica* (Martynova, 1970) are re-described based on type and fresh material. Eight new species of the genus are described; *S. pomorskii* **sp. nov.**, *S. homonomica* **sp. nov.**, *S. bisensillata* **sp. nov.**, *S. guzeriplica* **sp. nov.**, *S. posteriormollis* **sp. nov.**, *S. multisensillata* **sp. nov.**, *S. cruda* **sp. nov.**, and *S. erratica* **sp. nov.**, using material from Eurasia. A key to the known species of *Subisotoma* is given.

A new genus, *Isotopenola* **gen. nov.**, is erected for some southern representatives of the ‘*Cryptopygus*’ complex related to *Subisotoma*: *I. australis* (Womersley, 1934) **comb. nov.**, *I. loftyensis* (Womersley, 1934) **comb. nov.**, *I. nilgiris* (Denis, 1947) **comb. nov.** They are re-described based on type and fresh material. A new species *I. delicata* **sp. nov.** is described from Australia. A key to the known species of *Isotopenola* is given.

Резюме

Представлена таксономическая ревизия рода *Subisotoma* Stach, 1947. *Subisotoma pusilla* (Schäffer, 1900), *S. tenuis* (Dunger, 1982) и *S. asiatica* (Martynova, 1970) переописаны на основе типового и свежего материала. Восемь новых видов рода: *S. pomorskii* **sp. nov.**, *S. homonomica* **sp. nov.**, *S. bisensillata* **sp. nov.**, *S. guzeriplica* **sp. nov.**, *S. posteriormollis* **sp. nov.**, *S. multisensillata* **sp. nov.**, *S. cruda* **sp. nov.** и *S. erratica* **sp. nov.**—описаны по материалам из Евразии. Дается ключ к известным видам рода *Subisotoma*.

Новый род *Isotopenola* **gen. nov.** выделен для ряда южных представителей комплекса ‘*Cryptopygus*’ схожих с *Subisotoma*; *I. australis* (Womersley, 1934) **comb. nov.**, *I. loftyensis* (Womersley, 1934) **comb. nov.**, *I. nilgiris* (Denis, 1947) **comb. nov.**, они переписаны на основе типового и свежего материала. *Isotopenola delicata* **sp. nov.** описывается из Австралии. Дается ключ к известным видам рода *Isotopenola*.

Key words: taxonomy, Anurophorinae, new species, new genus, Eurasia, Australia, keys

Introduction

The genus *Subisotoma* was erected by Stach (1947) for two European species in the *Proisotoma* complex, *Isotoma pusilla* Schäffer, 1900, was made type species, and *Isotoma angularis* Axelson. This was because of their “intermediate” position between *Proisotoma* Börner, 1901 and *Folsomides* Stach, 1922 with a *Folsomides*-like body shape and furca but also a winged unguiculus. Gisin (1949) treated *Subisotoma* as a subgenus of *Proisotoma*, but later (1960) as a junior synonym of *Folsomides*. Palissa (1964) considered the genus *Subisotoma* to be an artificial taxon and transferred its type species to a new subgenus, *Clavisotoma*. The latter subgenus included European species of the *Proisotoma*-complex with clavate tibiotarsal chaetae, which *Folsomides* and *Ballistura* Börner, 1906 do not have, and lacking anterior manubrial chaetae, a difference from the subgenus *Proisotoma*. The name *Clavisotoma* Palissa, 1964 is unavailable as a type species was not designated (Ellis & Bellinger 1973). A substituted name, *Clavisotoma* Ellis, 1970 with *Proisotoma tuberculata* Stach, 1947 as the type species, was treated by us (Potapov 2001; Potapov *et al.* 2006) as a junior synonym of *Ballistura*. Reviewing Palaearctic species of the genus *Folsomides*, Fjellberg (1993) reestablished the genus *Subisotoma* on the base of examination of its type species, defined the main differences from *Folsomides* and proposed two tentative diagnoses, a strict and a broad one. The broad concept of the genus was accepted by Potapov (2001) in his synopsis on Palaearctic Isotomidae. A later study (Potapov *et al.* 2006) redefined the genera of *Proisotoma*-complex and noted that *Subisotoma* sensu Potapov (2001) is highly heterogeneous and included unrelated forms belonging to at least three genera; *Subisotoma*, *Ballistura* and *Scutisotoma* Bagnall, 1949.

Here we use the strict concept of the genus defined as Anurophorinae with all abdominal segments clearly separated, a *Folsomides*-like furca (manubrium without anterior chaetae, dens with few anterior and posterior chaetae, mucro usually not clearly set off from dens), tergal sensilla on abdomen situated slightly anterior to p-row of chaetae, B-row of chaetae on Ti.1–2 complete and lacking unpaired B_{4/5} chaeta.