

Description of a New Species of *Trimium* Aubé, 1833 (Staphylinidae: Pselaphinae) from Bulgaria and Greece

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Abstract: *Trimium insolitum* sp.n from Bulgaria (Rhodope Mts., Stara Planina Mts.) and Greece (Rhodope Mts.) is described. A complete list of the species of the genus *Trimium* Aubé, 1833 from Balkan Peninsula is provided.

Key words: Pselaphinae, *Trimium*, taxonomy, new species, Balkan Peninsula.

Introduction

The Genus *Trimium* Aubé, 1833 includes twenty nine species (LÖBL, BESUCHET 2004). Seventeen of them inhabit the Balkan Peninsula (Table 1). The only complete revision of the genus was done by KARAMAN (1967). In this work, the species of *Trimium* were separated into four species groups: *brevicornis*, *carpathica*, *amplipennis-hopfgarteni* and *relicta*.

During field work in the Rhodope Mountains (Bulgaria) in 2008, an unusual *Trimium* species was found. Later, more specimens of this species were discovered in the Muséum d'Histoire Naturelle, Genève and Volker Brachat's collections. Its description is presented below.

Materials and Methods

Dissections were made using standard techniques. The genitalia and other disjoined parts of the body were mounted in Canada balsam on an acetate label, which were pinned with the specimens.

The material used for this study is deposited in the following collections:

MHNG – Muséum d'Histoire Naturelle, Genève, Switzerland (G. Cuccodoro);

MNHB – Museum für Naturkunde der

Humboldt Universität zu Berlin, Germany (Johannes Frisch);

NMNH – National Museum of Natural History, Sofia, Bulgaria;

PCVB – Private collection of Volker Brachat, Geretsried, Germany.

Results

Trimium insolitum sp. n.

(Fig. 1 a, b, c, d)

Material examined: (11♂, 18♀): HOLOTYPE, ♂ labelled as follows: Bulgaria, Rhodope Mts., Peshtera env., bank of Novomahlenska River, in leaf litter, N42 00.404 E24 16.912, 580 m, 25.V.2008, leg. R. Bekchiev; red label HOLOTYPE *Trimium insolitum* sp. n., Bekchiev det., 2013 (NMNH); PARATYPES: (7♂, 14♀) Bulgaria, Stara Planina Mts., VI. 1968, leg. Rous; (1♂, 2♀) Bulgaria, Rhodope Mts., Peshtera env., bank of Novomahlenska River, in leaf litter, N42 00.404 E24 16.912, 580 m, 25.V.2008, leg. R. Bekchiev; (2♂, 2♀) Greece, Makedonia, West Rhodopes, Kavala, Karadere Forest, 1500-1600 m, 13-14.VI.2004, leg. V. Brachat (MHNG, MNHB, NMNH, PCVB).

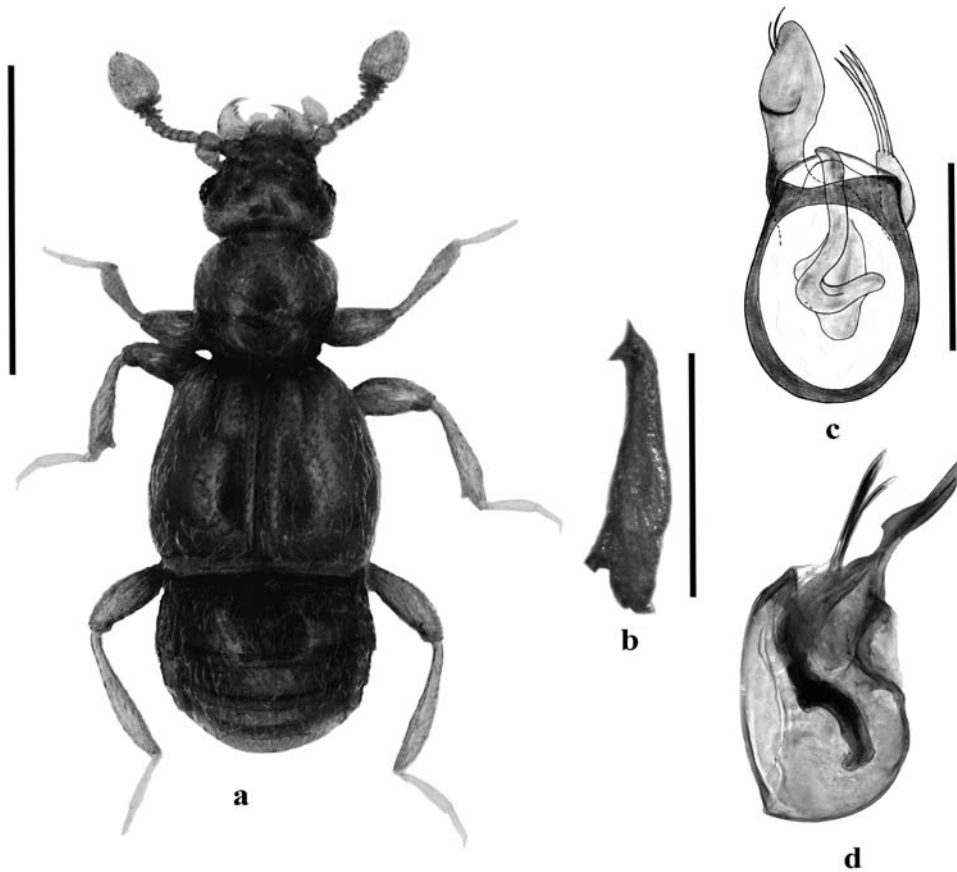


Fig. 1. *Trimium insolitum* sp. n.: a) habitus (scale – 0.65 mm); b) male mesotibia (scale – 0.2 mm); c-d) aedeagus, ventral and lateral view (scale – 0.15 mm)

Description: Body (Fig. 1a) length 1.2-1.3 mm, unicoloured, yellow-brown, covered with short semierected clear pubescence, maxillary palpi yellow.

Head clearly wider than long (0.26-0.32/ 0.17-0.19 mm), slightly punctuated in the anterior part, vertex smooth, with sulcus and fovea deep. Eyes well developed in the male – 30-35 ommatids, female with 6-7 small ommatids only. Antennae 0.29-0.31 mm long, with a typical shape for the genus. Pronotum about as wide as long (0.27-0.28/0.26-0.27 mm), widest in apical one third, lateral and median fovea well developed. Elytra short, longer than wide (0.44-0.46/0.36-0.40 mm). Abdomen with first visible tergite very large, about 0.38-0.42 mm, with long and well visible carinae, the distance between them equal to 0.085-0.090 mm. Legs short and robust. Aedeagus length 0.29-0.32 mm, shape very characteristic, as shown in Fig. 1 c-d.

Sexual dimorphism: Male with well developed eyes, mesotibia (Fig. 1b) with large triangular

extension on the inner margin, at apex with short, blunt spur. Last abdominal sternite large, limited with thin carinae on the basal side, deep longitudinal convexity in the middle and with a strong incision in the central apical part, covered with long range of hairs. Female without spur on matatibia, last abdominal sternite simple.

Differential diagnosis: *T. insolitum* sp. n. cannot be related to the other known species of the genus. It showed transitional characters between the species of *Trimium amplipennis-hopfgarteni* group (the distance between the carinae on IV abdominal tergite is $\frac{1}{4}$ of the tergite width; internal armature of the aedeagus well developed) and the species of *Trimium relictum* group (the two parameres of the aedeagus are well developed). The species differs easily from all the rest by the shape of the mesotibia, the aedeagus and the last abdominal sternite.

Etymology: The name of the species refers to the unusual and unique shape of the aedeagus and the mesotibia.

Table 1. List of species of the genus *Trimium* from the Balkan Peninsula

Species	Country
<i>Trimium aemonae</i> REITTER, 1882	Bosnia and Herzegovina, Croatia, Slovenia
<i>Trimium atticum</i> BESUCHET, 1969	Greece
<i>Trimium brevicorne</i> REICHENBACH, 1816	Serbia, Slovenia
<i>Trimium carpathicum</i> SAULCY, 1875	Albania, Bosnia and Herzegovina, Bulgaria, Greece, FYR Macedonia, Montenegro, Slovakia, Serbia
<i>Trimium caasicum</i> KOLENATI, 1846	Bulgaria, Greece, FYR Macedonia, Turkey
<i>Trimium cavicolle</i> REITTER, 1880	Bosnia and Herzegovina, Croatia
<i>Trimium expandum</i> REITTER, 1884	Bulgaria, Greece, FYR Macedonia
<i>Trimium graecum</i> KARAMAN, 1969	Greece, Bulgaria
<i>Trimium hopffgarteni</i> REITTER, 1881	Albania, Bosnia and Herzegovina, Croatia, Greece, Montenegro, Serbia
<i>Trimium illyricum</i> BESUCHET, 1969	Slovenia
<i>Trimium karamani</i> REITTER, 1913	Croatia
<i>Trimium latiusculum</i> REITTER, 1879	Bosnia and Herzegovina, Croatia, Slovenia
<i>Trimium libani</i> J. SAHLBERG, 1908	Greece
<i>Trimium lichtneckerti</i> MACHULKA, 1949	Bosnia and Herzegovina, Croatia, Greece, FYR Macedonia, Montenegro, Serbia
<i>Trimium puncticeps</i> REITTER, 1880	Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Montenegro, Serbia
<i>Trimium raffrayi</i> GUILLEBEAU, 1890	Croatia
<i>Trimium thessalicum</i> KARAMAN, 1967	Bulgaria, Greece, FYR Macedonia
<i>Trimium insolitum</i> sp. n.	Bulgaria, Greece

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