

**Confirmation of the synonymy of *Rhyzostylops*
with *Blattivorus* and the description of the male of
Blattivorus inquirendus
(Coleoptera: Ripiphoridae: Ripidiinae)**

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Abstract. Based on the examination of a winged male collected in central Italy and associated with the holotype (larviform female) of *Rhyzostylops inquirendus* Silvestri, 1906, the latter species is transferred to the genus *Blattivorus* Chobaut, 1891 and the synonymy of *Rhyzostylops* Silvestri, 1906 and *Blattivorus* is confirmed. The male of *Blattivorus inquirendus* (Silvestri, 1906), comb. nov. is described. A key to the European genera of Ripidiinae is provided.

Key words. Coleoptera, Ripiphoridae, Rhipidiinae, *Blattivorus*, *Rhyzostylops*, new synonymy, new combination, Palaearctic Region, Italy

Introduction

The monotypic genus *Rhyzostylops* Silvestri, 1906 belonging to the subfamily Ripidiinae was described by SILVESTRI (1906) from a unique larviform female collected in Bevagna (Umbria, central Italy). The description of *R. inquirendus* Silvestri, 1906 also contains details of the eggs and the first larval instar. The validity of the genus *Rhyzostylops* was questioned by RIEK (1955: 73) who regarded the specimen as a final larval instar of the genus *Ripidius* Thunberg, 1806. However, ŠVÁCHA (1994: 616) rebutted arguments mentioned by RIEK (1955) and concluded that the holotype is without doubt an adult. ŠVÁCHA (1994) also considered *Rhyzostylops* as a possible synonym of the genus *Blattivorus* Chobaut, 1891 of which only males were known. To prove his opinion, the hitherto unknown male of *Rhyzostylops* was essential. A ripidiine male specimen recently collected about 150 km west of Bevagna, which I have associated because of its sympatrical occurrence in central Italy with the female holotype of *Rhyzostylops inquirendus*, confirms the synonymy proposed by ŠVÁCHA (1994). The male of *Blattivorus inquirendus* (Silvestri, 1906) comb. nov. is described herein.

Material and methods

The photographs of the specimen were taken using an Olympus Camedia C-5060 digital camera attached to an Olympus SZX9 binocular microscope. Partially focused images of each figure were combined using Helicon Focus 3.20.2.Pro software.

The specimen is deposited in the Museo di Storia Naturale e del Territorio, Calci, Italy (Marco Dellacasa). Label data are cited as follows: lines are indicated by a single slash (/) and comments appear in square brackets.

Taxonomy

Genus *Blattivorus* Chobaut, 1891

Blattivorus Chobaut, 1891: 237. Type species: *Rhipidius lusitanicus* Gerstaecker, 1855.

Rhyzostylops Silvestri, 1906: 316, **syn. nov.** Type species: *Rhyzostylops inquirendus* Silvestri, 1906.

Rhyzostylops: SILVESTRI (1906): 318. Incorrect original spelling (see below).

Blattivorus was erected by CHOBAUT (1891) as a subgenus of *Ripidius* to accommodate the species *R. lusitanicus* Gerstaecker, 1855, described from a male specimen collected in Portugal. *Blattivorus* was raised to generic level by CHOBAUT (1904) based on its 10-segmented antennae as opposed to *Ripidius*, which has 11 antennomeres. Two years later, CHOBAUT (1906) added another new species, *B. madagascariensis* Chobaut, 1906. The generic placement of the latter species was, however, questioned by RIKHTER (1949) who suggested that *B. madagascariensis* might be a representative of another, as yet undescribed genus. Deposition of the type is not known to me and no other specimens of this species are available. Because of its tropical distribution I regard its generic placement as *incertae sedis*. The third species described in the genus, *B. margaritae* Rikhter, 1949 from Armenia, is also known from a single male.

Correct original spelling of *Rhyzostylops*. Two different spellings occur in the original description by SILVESTRI (1906). From 15 incidences of the generic name, the name was spelled 14 times as *Rhyzostylops* and once (page 318, paragraph ‘Osservazione’) as *Rhizostylops*. I failed to find any paper solving this discrepancy according to the article 24.2.3. of the Code (ICZN 1999). Almost all subsequent authors (including BESUCHET 1956, PORTA 1907, RIEK 1955 and ŠVÁCHA 1994) have used *Rhyzostylops*. Only in a few cases (e.g., in CSIKI 1913 or WINKLER 1924–1932), the spelling ‘*Rhizostylops*’ has been used. I hereby choose ‘*Rhyzostylops*’ as the correct original spelling, thus making *Rhizostylops* an unavailable name.

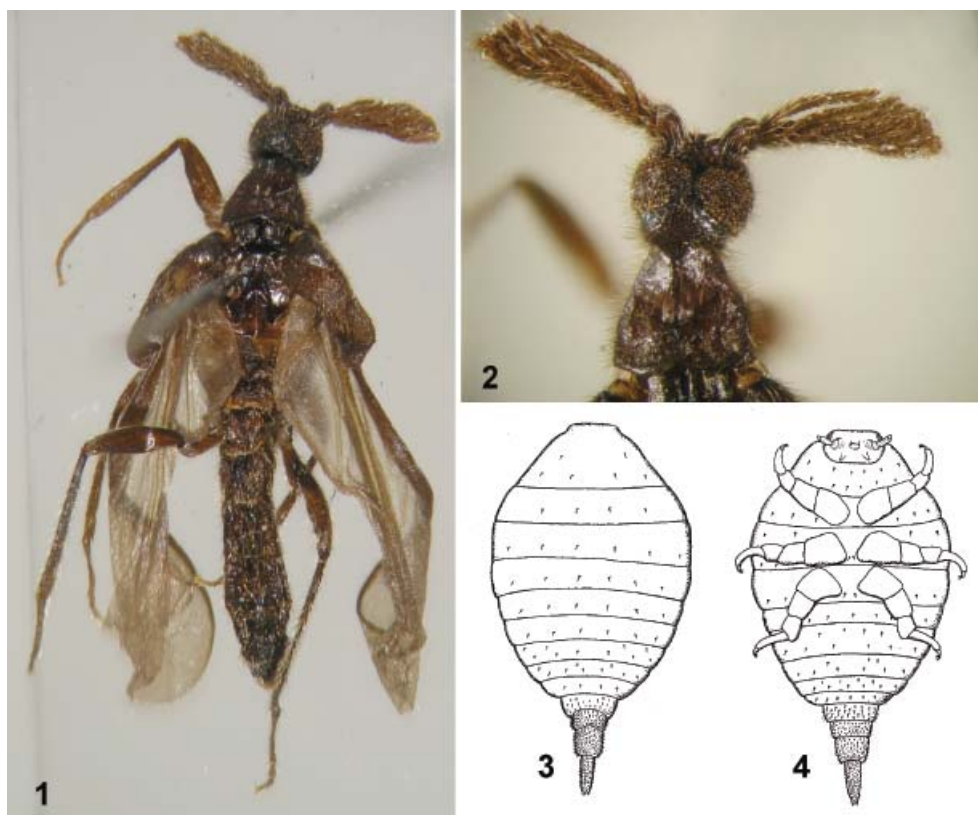
Blattivorus inquirendus (Silvestri, 1906) comb. nov.

(Figs. 1–3)

Rhyzostylops inquirendus Silvestri, 1906: 317.

Specimen examined. ITALY: 1 ♂, ‘Venturina LI-I- [Livorno, Italy] 2000 / malaise Bianca/Nera / 11/16-VIII / 16°01’ .17 N - 10°36’ .34 E / leg. F. Strumia [printed label]’.

Description of male. Body length 4.0 mm (because of the possible deformation caused by desiccation, the real body length can be ca. 4.5 mm). Body dark brown, less sclerotized parts



Figs. 1–4. *Blattivorus inquirendus* (Silvestri, 1906). 1 – male habitus; 2 – male, detail of antennae, head and pronotum; 3–4 – female habitus (after SILVESTRI 1906): 3 – dorsal view, 4 – ventral view.

light brown, hind wings fuscous with brown veins, whole body (except mesothorax) and all appendages covered with long, pale, erect pubescence.

Head globular, slightly narrower than base of pronotum. Eyes large, consisting of large isolated convex ommatidia, with long setae inserted in spaces between them. Eyes occupying two thirds of central part of dorsal side of head and whole ventral side of head, well separated dorsally by median line. Postocular ommatidia absent. Mouth parts extremely reduced to knob-like stylus inserted on ventral side of head.

Antennae inserted anteriorly, antennal sockets well separated. Antennae consisting of 10 antennomeres: scape twice as wide as long, robust, pedicel small, rounded, almost hidden in scape, antennomere 3 shortly extended anteriorly, appressed to antennomere 4, antennomeres 4–10 bearing long and flat processes, touching each other, antennomeres 4–9 curved at base.

Pronotum slightly wider than long, elevated and saddle-like anteriorly. Central part of pronotum with deep U-shaped impression.

Mesothoracic scutum divided medially into two glabrous lobes. Elytra shortened, reaching end of first abdominal segment, each elytron three times as long as wide, rounded at tip, glabrous in basal part.

Legs long and slender, femora of all legs widest at midlength, tibiae narrow, wider apically, tarsal formula 5-5-4, hind tarsomere 1 longer than the three remaining combined, claws simple.

Abdomen long and narrow, slightly shorter than hind wings.

Genitalia not examined.

Discussion

Although the description of the type species of the genus *Blattivorus*, *B. lusitanicus*, is uninformative (GERSTAECKER 1855a,b), Z. Falin examined the types of *B. lusitanicus* and *B. margaritae* and corrected some misinterpretations in the original descriptions of both species (KAUPP et al. 2001: 174). He confirmed that the antennae 'are composed of three simple basal antennomeres and seven flabellate apical antennomeres' and that 'palpi are atrophied to an impaired, knob-like tubercle and post ocular ommatidia are absent'. RIKHTER (1949) mentioned in the description of *B. margaritae* further remarkable feature unique to the genus *Blattivorus*: pronotum with two deep impressions and saddle-shaped above the neck. All of the above mentioned features are also present in the male described in this paper, and therefore I synonymize here the genus *Rhyzostylops* with *Blattivorus*. The only other known representative of the subfamily Ripidiinae reported from Italy is *Ripidius quadriceps* Abeille de Perrin, 1872 (Italian records of this species were summarized by RATTI (1999)). Both sexes and all larval instars are known for this species and the confusion of the male described above with the genus *Ripidius* is impossible (for morphology of *Ripidius* see BESUCHET (1956)).

Key to the European genera of Ripidiinae

- 1 Wings and elytra developed, body wedge-shaped, eyes holoptical, antennae partially flabellate (males). 2
- Wings and elytra absent, body larviform, eyes small, placed antero-laterally on the head, antennae simple (females). 3
- 2 Antennae 11-segmented with eight distal antennomeres uniflabellate, postocular ommatidia present, pronotum trapezoid, flat, maxillary palpi reduced to bifurcate stylus. *Ripidius* Thunberg, 1806
- Antennae 10-segmented with seven distal antennomeres uniflabellate, postocular ommatidia absent, pronotum anteriorly above the neck narrower and elevated, maxillary palpi reduced to knob-like tubercle. *Blattivorus* Chobaut, 1891
- 3 Antennae 11-segmented, tarsomeres with full heteromerous pattern (tarsal formula 5-5-4). *Ripidius* Thunberg, 1806
- Antennae 3-segmented, number of tarsomeres reduced in all legs (tarsal formula 1-1-1). *Blattivorus* Chobaut, 1891

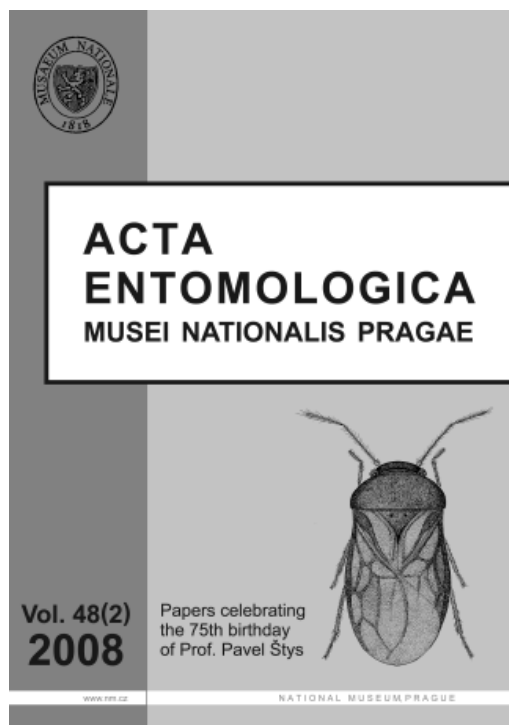
Acknowledgements

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Papers celebrating the 75th birthday of Prof. Pavel Štys



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