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Discovery of *Biblopectus strouhali* BEIER, 1928 in Poland (Coleoptera: Staphylinidae: Pselaphinae)

Odkrycie *Biblopectus strouhali* BEIER, 1928 w Polsce
(Coleoptera: Staphylinidae: Pselaphinae)

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ABSTRACT: *Biblopectus strouhali* BEIER (Coleoptera, Staphylinidae, Pselaphinae) is reported from Poland for the first time on the basis of a male specimen collected in Lower Silesia, SW Poland.

KEY WORDS: Coleoptera, Staphylinidae, Pselaphinae, *Biblopectus strouhali*, new record, Poland.

Introduction

The minute beetles belonging to the subfamily Pselaphinae of Staphylinidae have never attracted much attention of Polish coleopterists. Even the most common species have been recorded from relatively small number of localities, and existing faunistic data are very scarce and do not reflect true distributions of pselaphines in Poland. The occurrence of several species has been mentioned by various authors in the first half of the 20th century, but later not confirmed by new findings (BURAKOWSKI et al. 1978). The current state of knowledge and errors in the previously published catalogues have been recently briefly discussed by KUBISZ and JAŁOSZYŃSKI (2009). The major factor that hampers faunistic study of Pselaphinae in Poland seems to be a uniform external morphology of species in many genera, that poses

identification problems for beginners. Pselaphinae, and especially Euplectini, are relatively difficult to identify and the necessity to extract and examine the microscopic aedeagus repels amateur entomologists. Additionally, collecting of some species requires sifting leaf litter and mosses in hardly accessible habitats as swamps and bogs. One of the most effective methods – the flight intercept traps – is only marginally used in faunistic surveys in Poland and the majority of published records present data concerning species collected by sifting-based techniques. Therefore, a strong bias toward collecting and recording taxa that inhabit the forest floor and rotten wood is not surprising, while species associated with other environments remain poorly studied.

However, recent years brought a remarkable revival of research on Pselaphinae in Poland, and intensified faunistic surveys yielded a number of interesting discoveries. The occurrence of *Euplectus tholini* GUILLEBEAU and three species of *Brachygluta* THOMSON previously treated as a single species *B. haematica* (REICHENBACH) were confirmed (JAŁOSZYŃSKI et al. 2005, 2007), and several pselaphines were newly recorded from Poland. These included *Euplectus bonvouloiri narentinus* REITTER (JAŁOSZYŃSKI et al. 2005), *Euplectus duponti* AUBÉ (GAWROŃSKI, OLEKSA 2006), *Biblopectus spinosus* RAFFRAY (GAWROŃSKI, OLEKSA 2005), and *Brachygluta klimski* (HOLDHAUS) (KUBISZ, JAŁOSZYŃSKI 2009). Still, several species known to occur in neighboring countries seem plausible to be found also in Poland, and further efforts will certainly expand the checklist of Pselaphinae of Poland.

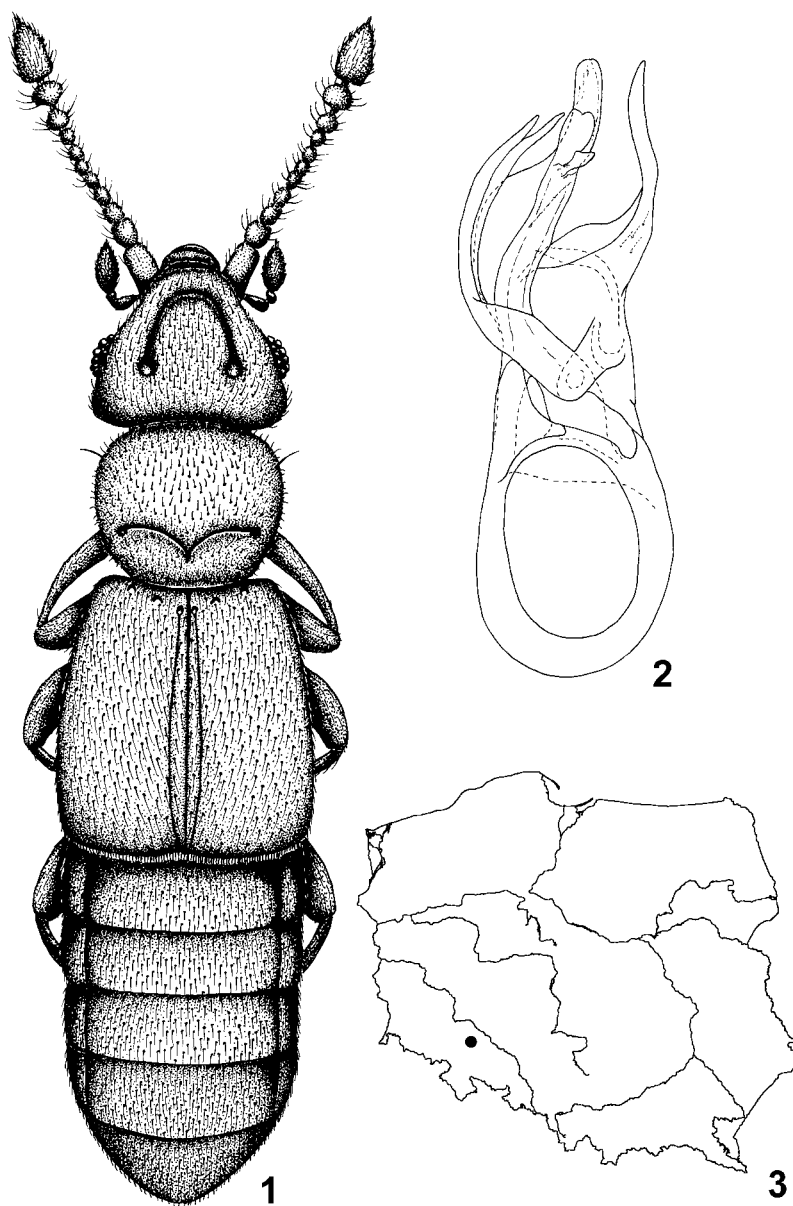
In this paper, we present a discovery of another pselaphine species previously not recorded from Poland. A single male of *Biblopectus strouhali* BEIER (Figs. 1, 2) was collected by a pitfall trap set in a corn field in Lower Silesia, SW Poland (Fig. 3), nearly 300 km from the nearest known locality in Slovakia, where this species was found previously. The voucher specimen is deposited in the collection of the first author.

Material examined

Biblopectus strouhali BEIER, 1928

– Lower Silesia: Budziszów (UTM: XS34), 18 VI 2009 – 1♂, corn field, leg. J. TWARDOWSKI.

The specimen was collected as a part of entomological surveys within the framework project „Environmental and economic aspects of permitting cultivation of GM crops in Poland” funded by the Polish Ministry of Science and Higher Education.



Figs. 1–3. *Biblopectus strouhali* BEIER: 1 – habitus, 2 – aedeagus in ventral view, 3 – distribution in Poland

Ryc. 1–3. *Biblopectus strouhali* BEIER: 1 – habitus, 2 – edeagus w rzucie brzuszny, 3 – rozmieszczenie w Polsce

Remarks

Biblopectus strouhali has been known to occur only in France, Austria, Switzerland, Hungary, Slovakia and countries of the former Yugoslavia (Bosnia Herzegovina, Croatia and Slovenia) (LÖBL, BESUCHET 2004). It is very rare throughout its entire range; in Slovakia, for instance, it has been found only in the western (Leopoldov) and central (Sliač and Kováčovce) parts of the country (LÖBL 1960). Very little is known about the biology of this minute species; in addition to collecting *B. strouhali* by sifting in wet habitats BESUCHET (1955) mentioned also a single finding in a nest of the mole.

Including the newly found species, five representatives of *Biblopectus* are known to occur in Poland: *B. ambiguus* (REICHENBACH, 1816); *B. pusillus* (DENNY, 1825), *B. spinosus* RAFFRAY, 1914 and *B. tenebrosus* (REITTER, 1880) (BURAKOWSKI et al. 1978; GAWROŃSKI, OLEKSA 2005). Only *B. ambiguus* is common (BURAKOWSKI et al. 1978; JAŁOSZYŃSKI unpublished data); *B. spinosus* is known from a single locality in northern Poland (GAWROŃSKI, OLEKSA 2005), and each of the two remaining species has been reported only three times from Poland, over half a century ago (BURAKOWSKI et al. 1978). *Biblopectus strouhali* is most similar to *B. pusillus* in having a very small and slender body, rarely reaching 1.1 mm in length. All other species known from Poland are distinctly larger, around 1.2 mm in length. However, unusually small individuals of *B. ambiguus*, *B. spinosus* and *B. tenebrosus* have been reported from other areas (BESUCHET 1955). The external morphology of *Biblopectus* is very uniform and the primary diagnostic characters are those associated with the unique and complex aedeagus (Fig. 2). All Central European species can be identified using keys and figures given by BESUCHET (1955, 1974) and LÖBL (1960). Taking into account known distributions of *Biblopectus* in Europe, *B. delhermi* GUILLEBEAU, 1888, *B. minutissimus* (AUBÉ, 1833) and *B. obtusus* GUILLEBEAU, 1888 may also occur in Poland. These three very small species have been found in Germany and Slovakia, and *B. obtusus* also in the Czech Republic (LÖBL, BESUCHET 2004).

STRESZCZENIE

Biblopectus strouhali BEIER (Coleoptera: Staphylinidae: Pselaphinae) jest chrząszczem niezwykle rzadkim w całym swoim zasięgu, obejmującym dotychczas Francję, Austrię, Szwajcarię, Węgry, Słowację oraz kraje byłej Jugosławii. W pracy podano pierwsze polskie stanowisko tego marnika, znajdujące się na terenie Dolnego Śląska. Dane dotyczące wszystkich znanych z kraju lub mogących występować w Polsce przedstawicieli rodzaju *Biblopectus* zostały przedyskutowane, a kluczowy dla identyfikacji *B. strouhali* edeagus został zilustrowany.

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