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Notes on the types of *Beris* LATREILLE, 1802 (Diptera, Stratiomyidae) in the Meigen collection

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A b s t r a c t : Types of the genus *Beris* in the Meigen collection are investigated. *Beris nigra* MEIGEN, 1820 is found to be a senior synonym of *Beris hauseri* STUKE, 2004 syn.nov. The holotype of *Beris fuscipes* MEIGEN, 1820 is consistent with the current interpretation of that species. The holotype of *B. obscura* belongs to *Beris chalybata* (FORSTER, 1771). Other specimens of *obscura* in the Meigen collection, including two specimens of *Beris morrisii* DALE, 1841 are no types.

K e y w o r d s : *Beris*, Meigen, Diptera, Stratiomyidae

Introduction

The genus *Beris* is characterized by 4-8 (usually 6) spinelike projections on the hind margin of the scutellum and the absent palpi (ROZKOŠNÝ 1982). It is represented in Europe by 10 species, of which two have a predominantly orange abdomen and eight a green abdomen. Especially the green species are very similar and often difficult to separate by external characters. STUKE (2004) has shown that under the name *B. strobli* DUŠEK & ROZKOŠNÝ, 1968 a cryptic species was hidden: *B. hauseri* STUKE, 2004. At the time, both ROZKOŠNÝ (1982) and STUKE (2004) did not have the opportunity to investigate the types of relevant species as present in the Meigen collection at Museum national d'histoire naturelle (MNHN) in Paris. Nowadays, photographs of the types in Meigen's collection are available online. Types of four species described by MEIGEN (1820) in the genus *Beris* are present in MNHN and will be discussed.

Types in the collection Meigen (MNHN)

Beris fuscipes MEIGEN, 1820

Only the male holotype is present, which agrees with the original description and illustration (MORGE 1976). It is consistent with the current interpretation of *B. fuscipes* (ROZKOŠNÝ 1982, WOODLEY 2001).

Beris nigra MEIGEN, 1820

Beris nigra was described by MEIGEN (1820) from a female, supposedly sent to him by Leach and illustrated in an unpublished plate (facsimile reproduction by MORGE (1976)). The holotype is still present at MNHN (figs 1-2). It is in generally good condition, though the head and abdominal tip are missing.

This species was considered likely to be *B. chalybata* (FORSTER, 1771) by VERRALL (1909) ("appears to me to be"), a nomen dubium, but surprisingly close to *B. strobli* by ROZKOŠNÝ (1982) and synonymous with *B. fuscipes* MEIGEN, 1820 by WOODLEY (2001) (fig. 3). In the latter species, the female frons is much narrower than the width of an eye. However, in the holotype the vertex is wide (well supported by the original description and plate) and therefore, I agree with ROZKOŠNÝ (1982) the synonymy with *B. fuscipes* cannot be accepted. A broad vertex is found only in *B. chalybata*, *B. hauseri* and *B. strobli*. All metatarsi of the holotype are yellow, which is an unique character for *B. hauseri* (MARTENS et al. 2013). Moreover, the yellow femora and tibiae with broad dark bands on all femora and hind tibia also indicate *B. hauseri*. Hence, *Beris nigra* is a senior synonym of the species currently known as *B. hauseri* **syn.nov.** Clearly, Meigen's name has priority.

It has been argued that *B. nigra* cannot be identical with *B. strobli*, or *B. hauseri*, since those species are not recorded from the United Kingdom, where the locus typicus is supposed to be. Given its presence in western Belgium (MARTENS et al. 2013) and the Netherlands (BRUGGE 2002, as *B. strobli*), *Beris nigra* might occur or have occurred in the United Kingdom. A reexamination of the British material is necessary to evaluate the current status of *B. hauseri* in the United Kingdom. There is also a possibility of a mix-up at Meigen's desk. Published type localities outside the known distribution can simply be in error, as for instance shown in the case of *Rhagio mellinus* BECKER, 1921 (ZEEGERS & ÁLVAREZ FIDALGO 2018). If we do insist that *B. nigra* cannot be synonymous with *B. hauseri* because its type from the United Kingdom, we are left with a specimen belonging to a species found only once before 1820, never to be found again. This is unlikely, to say the least. Apart from the type locality, the synonymy is obvious and straightforward.

Due to the confusion between *Beris nigra* and *B. strobli*, most records for *B. strobli* mentioned in the older literature are unreliable, including ROZKOŠNÝ (1982). *Beris strobli* was described from the Austrian Alps and is recorded from Germany (Alps, Harz), Czech Republic (above 600 m.) and Hungary by STUKE (2004), Italy (Stelvio at altitudes between 930-2315 m.) by STUKE (2008) and from Switzerland (altitudes 1800-1920 m.) by HAENNI (2019). I have seen pictures of genuine *B. strobli* from Slovakia (Mala Fatra). Contrary, all specimens seen from lower altitudes, including of all Scandinavia, belong to *B. nigra* rather than *B. strobli*. This includes Belgium (MARTENS et al. 2013), the Netherlands (BRUGGE 2002), Germany (STUKE 2004), Norway (FALCK 2007), Sweden as far north as 62°N (diptera.info) and Finland (KAHANPÄÄ et al. 2014). It should definitely occur in Denmark. HAENNI (2019) records *B. nigra* (as *B. hauseri*) from Switzerland, but only from the Jura up to 1200 m above sea level. The general picture is that *B. strobli* is restricted to the mountains of central Europe, whereas *B. nigra* occurs all over temporal and boreal Europe at lower altitudes, reaching 1200 m above sea level in the Jura.

***Beris obscura* MEIGEN, 1820**

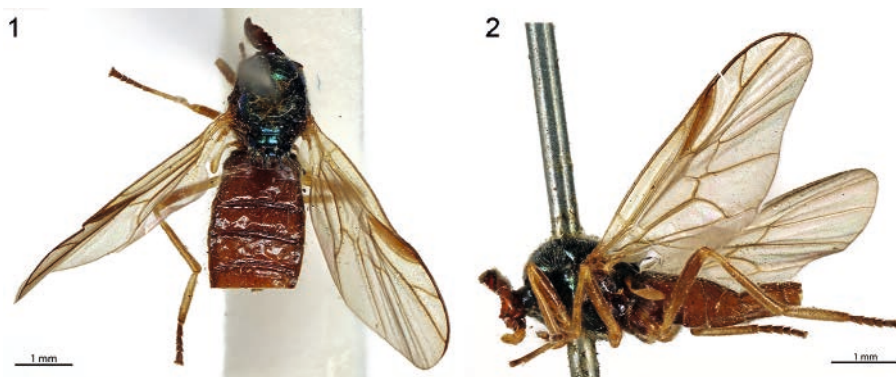
Beris obscura was described by Meigen from a single female, sent to him by Baumhauer. Already when Meigen got the specimen, the hind legs were missing (MEIGEN 1820, MORGE 1975). Four specimens, 2 males and 2 females, in the Meigen collection are labelled as syntypes. Only one (catalogue number MNHN ED 3731) is a female with missing hind legs. It is in perfect agreement with the original illustration (MORGE 1975) and it is accepted to be the holotype. MEIGEN (1820) compared *Beris obscura* with *Beris* (currently: *Chorisops*) *tibialis*, the type is clearly a female *Beris* though (eye hairy, palpus

absent). The broad vertex, yellow femora and tibiae and dark tarsi make an identification as *Beris chalybata* obvious. This synonymy was already established by ROZKOŠNÝ (1982). Note that *Beris obscura* STROBL, 1910 nec MEIGEN, 1820 is a different taxon, currently known as *Beris strobli*.

The other three specimens labelled as syntypes cannot be syntypes, since the description was explicitly based on one female specimen. One (ED 3730) is a male *Beris chalybata*, one male (ED3732) and one female (ED3733) belong to *Beris morrisii* DALE, 1841 as already observed by WOODLEY (2001). Since the other specimens are no types, there are no nomenclatoric consequences for the name *Beris morrisii*.

***Beris tibialis* MEIGEN, 1820**

Two specimens are present, a male and a female, consistent with Meigen's description. The male is selected by WOODLEY (2001) as lectotype. The female paralectotype is nearly completely destroyed. The species is currently considered to belong to another genus: *Chorisops* RONDANI, 1856 (ROZKOŠNÝ 1982).



Figs 1-2. *Beris nigra* MEIGEN, 1820, holotype. (1) Dorsal. (2) Lateral. [courtesy Museum national d'histoire naturel, Paris]

Acknowledgements

I would like to thank Jens-Hermann Stuke for providing historical information on his description of *Beris hauseri*. The Paris museum MNHN made photographs of Meigen types online available.

Zusammenfassung

Typen der Gattung *Beris* von der Sammlung Meigen werden untersucht. *Beris nigra* MEIGEN, 1820 ist ein Synonym zu *Beris hauseri* STUKE, 2004 syn.nov. Der Holotype von *Beris fuscipes* MEIGEN, 1820 stimmt mit der aktuellen Interpretation dieser Art überein. Der Holotype von *B. obscura* gehört zu *Beris chalybata* (FORSTER, 1771). Andere Belege von *B. obscura* in der Sammlung Meigen, auch zwei Belege von *Beris morrisii* DALE, 1841, sind keine Typen.

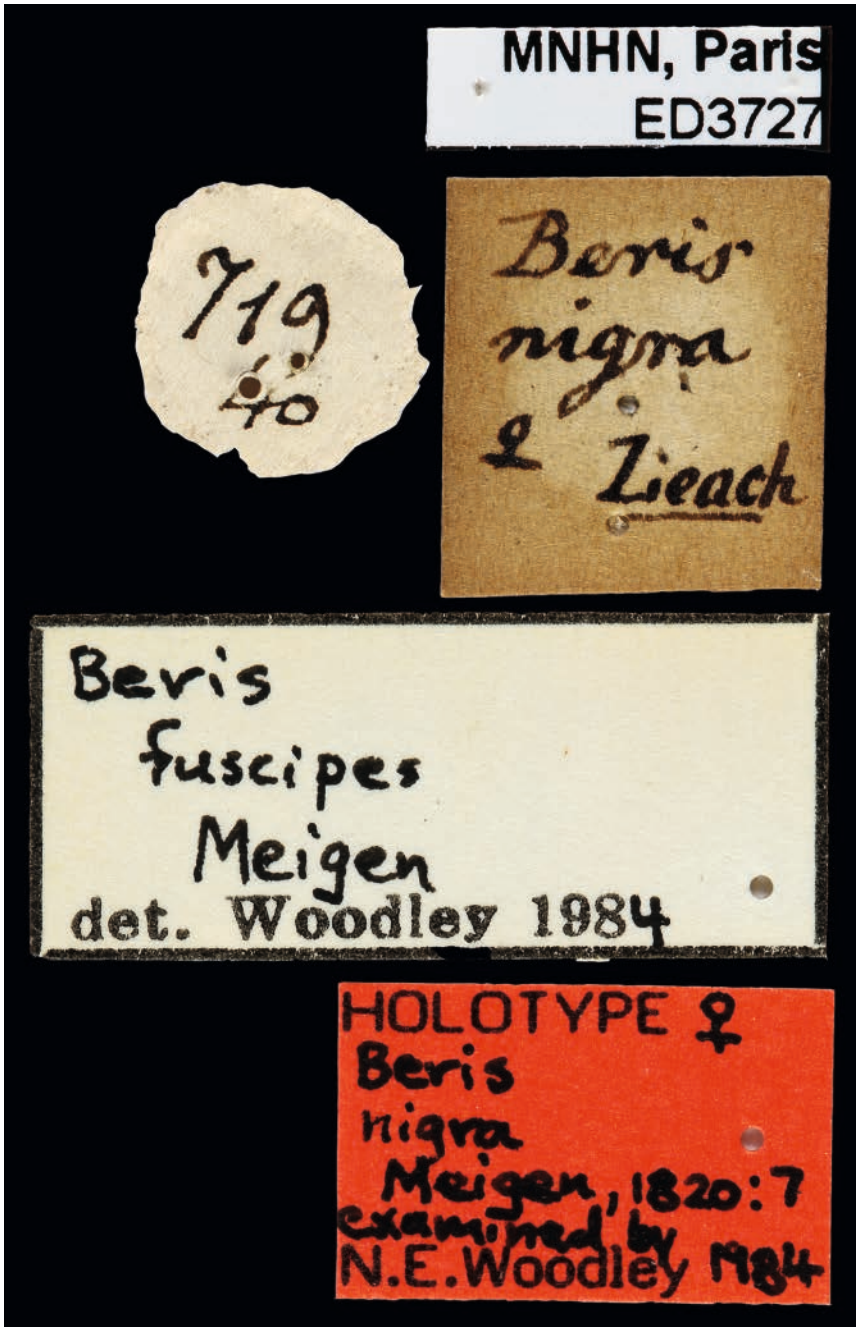


Fig. 3. *Beris nigra* MEIGEN, 1820, labels holotype.

Literature

- BRUGGE B. (2002): Wapenvliegental, tweede druk. — Jeugdbondsuitgeverij, Utrecht: 94 pp.
- DUŠEK J. & R. ROZKOŠNÝ (1968): *Beris strobli* nom.nov. (Diptera, Stratiomyidae). — *Reichenbachia* **10**: 293-298.
- FALCK M. (2007): Notes on the Norwegian species of *Beris* LATREILLE, 1802 (Diptera, Stratiomyidae). — *Norwegian Journal of Entomology* **54**: 55-58.
- HAENNI J.-P. (2019): Sur la presence en Suisse de *Beris hauseri* STUKE, 2004 (Diptera, Stratiomyidae). — *Entomo Helvetica* **12**: 164-168.
- KAHANPÄÄ J., WINQVIST K. & Th. ZEEGERS (2014): Checklist of the 'lower Brachyera' of Finland: Tabanomorpha, Asilomorpha and associated families (Diptera). — *Zookeys* **441**: 165-181.
- MARTENS Ch., MENTEN J. & K. VERHOEYEN (2013): On the occurrence of *Beris strobli* DUŠEK & ROZKOŠNÝ, 1968 and *Beris hauseri* STUKE, 2004 in Belgium (Diptera: Stratiomyidae). — *Bulletin de la Société royale belge d'Entomologie* **149**: 17-21.
- MEIGEN J.W. (1820). Systematische Beschreibung der bekannten Europäischen zweiflügeligen Insekten. Zweiter Theil mit zehn Kupfertafeln. — Friedrich Wilhelm Forstmann, Aachen: x + 363 pp.
- MORGE G. (1975): Dipteren-Farbtafeln nach den bisher nicht veröffentlichten Original-Handzeichnungen Meigens: "Johann Wilhem Meigen: Abbildungen der europaischen zweiflügeligen Insekten, nach der Natur. Pars I. Vorwort des Herausgebers – Faksimiles von Original-Legenden und – Index: "Erklärung der Fig." und "Alphabetisches Verzeichniss der Gattungen und Arten"- Farbtafeln I – LXXX. — *Beträge zur Entomologie* **25**: 383-500.
- MORGE G. (1976): Dipteren-Farbtafeln nach den bisher nicht veröffentlichten Original-Handzeichnungen Meigens: "Johann Wilhem Meigen: Abbildungen der europaischen zweiflügeligen Insekten, nach der Natur. Pars III: Farbtafeln CLXI-CCCV. — *Beträge zur Entomologie* **26/2**: 543.
- ROZKOŠNÝ R. (1982): A biosystematic study of the European Stratiomyidae (Diptera). Volume I: Introduction, Beridinae, Sarginae and Stratiomyinae. — Dr. W. Junk publishers, Den Haag: 401 pp.
- STUKE J.-H. (2004): Ein neue Art der Gattung *Beris* LATREILLE, 1802 aus Mitteleuropa (Diptera: Stratiomyidae). — *Beträge zur Entomologie* **54/2**: 333-342.
- STUKE J.-H. (2008): 4.3.26 Stratiomyidae. In: ZIEGLER J. (ed.): *Diptera Stelviana*. Vol. 1. — *Studia Dipterologica Supplement* **16**: 305-307.
- VERRALL G.H. (1909): British flies, Vol. V. Stratiomyidae and succeeding families of the Diptera Brachycera of Great Britain. — London: Gurney & Jackson, London: 780 pp.
- WOODLEY N.E. (2001): A World Catalogue of the Stratiomyidae (Insecta: Diptera). — *Myia* **11**: 1-473.
- ZEEGERS Th. & P. ÁLVAREZ FIDALGO (2018): Review of the *scolopaceus*-group of *Rhagio* FABRICIUS 1775 with the description of a new species from the Iberian Peninsula. — *BV news Publicaciones Científicas* **7/96**: 91-123.

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