

Scientific note

[urn:lsid:zoobank.org:pub:A6BFC9BE-0819-4381-9199-2198E05A3145](https://zoobank.org/pub:A6BFC9BE-0819-4381-9199-2198E05A3145)

Atalanta astigmatica Stackelberg, a new synonym of *Wiedemannia lota* Walker (Diptera: Empididae: Clinocerinae)

Bradley J. Sinclair^{1*} & Igor V. Shamshev²

¹Canadian National Collection of Insects & Canadian Food Inspection Agency, OPL-Entomology, K.W. Neatby Bldg., C.E.F.,
960 Carling Ave., Ottawa, ON, K1A 0C6, Canada

²Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg, 199034, Russia

*Corresponding author: Email: bradley.sinclair@canada.ca

¹[urn:lsid:zoobank.org:author:4516327F-B73E-456C-927F-18EFB0B9E08B](https://zoobank.org/author:4516327F-B73E-456C-927F-18EFB0B9E08B)

²[urn:lsid:zoobank.org:author:569F41CC-EC2B-4CF0-802A-8D7056C72C93](https://zoobank.org/author:569F41CC-EC2B-4CF0-802A-8D7056C72C93)

Abstract. An uncatalogued species of Empididae, *Atalanta (Philolutra) astigmatica* Stackelberg, 1937 was recently discovered. This species is a new synonym of *Wiedemannia lota* Walker, 1851.

Key words. Turkmenistan, dance flies, Palaearctic.

While sorting through miscellaneous reprints, the publication of the Russian dipterist A.A. Stackelberg (1937) was found to include an uncatalogued species of Empididae: *Atalanta (Philolutra) astigmatica* Stackelberg, 1937. The species was based on four males and one female collected at Kara-Kala (now Magtymguly), Turkmenistan. The species is not listed in the Palaearctic and World catalogues (Chvála & Wagner 1989; Yang et al. 2007), but is recorded in the online database: Systema Dipteroorum (Evenhuis & Pape 2019). It should be noted that *A. (P.) astigmatica* is the only species of Empididae described by A.A. Stackelberg. *Atalanta* Meigen, 1800 is treated as a junior synonym of *Clinocera* Meigen, 1803 (Evenhuis & Pape 2017).

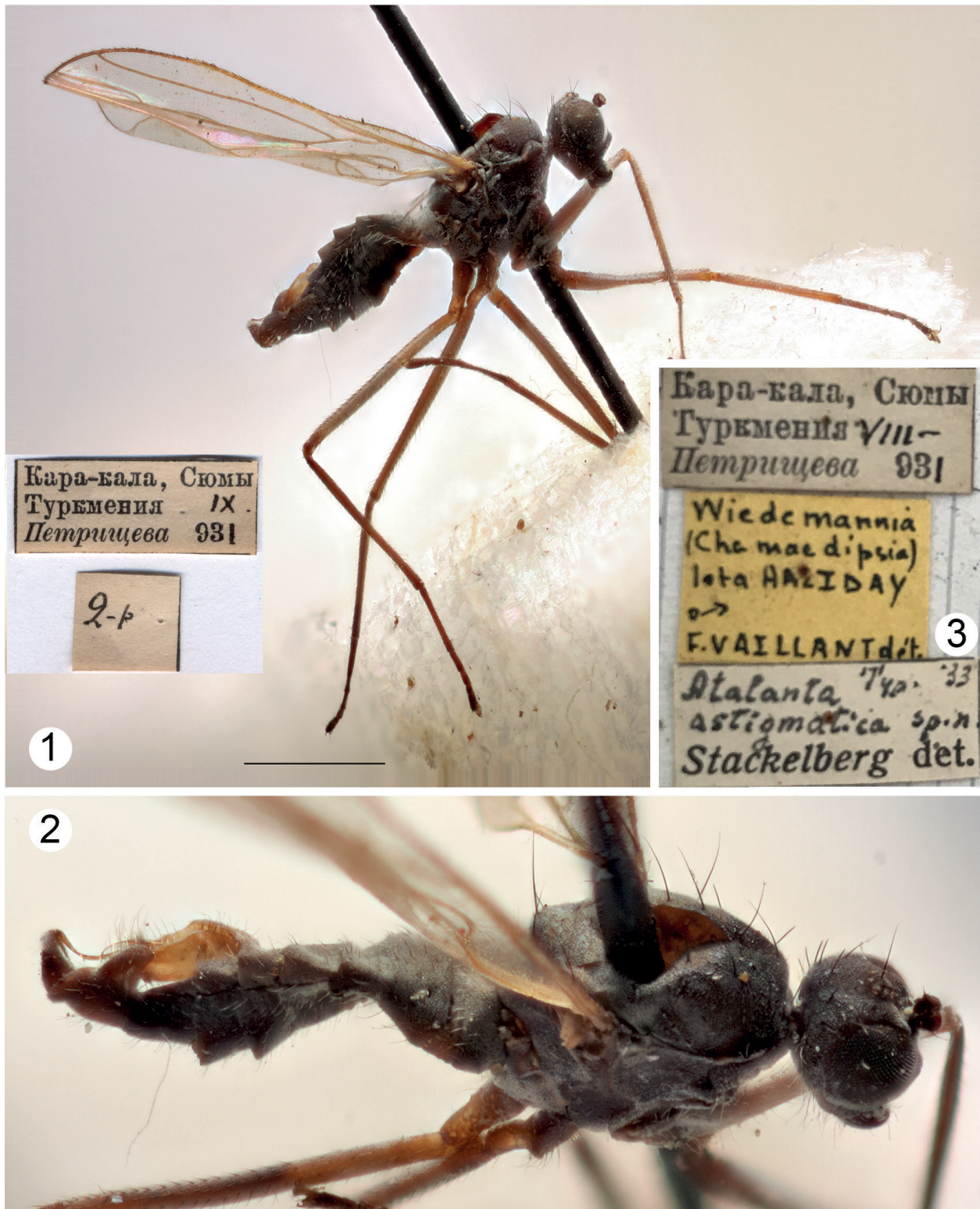
The type series of *A. (P.) astigmatica* was collected by the Russian parasitologist Polina A. Petrishtsheva (St. Petersburg, Institute of Experimental Medicine). She studied invertebrates (especially culicids and phlebotomids of Diptera) as vectors of diseases but her collection (present in ZIN) also includes many other taxa of Diptera that were found together with imagoes of Culicidae and Psychodidae in mammal burrows, caves, etc. The type locality, Magtymguly, is a small town (village in 1931) situated near the southern slopes of the Kopet Dag Range on the river Sumbur (south-western Turkmenistan) and it is not a surprise that a species of aquatic empidids was found. However, P.A. Petrishtsheva notes on labels (also in the title of the paper of A.A. Stackelberg) a specific biotope, “syum” (syumy, plural in Russian), which are artificial or natural caves near villages which local people used mainly for food storage. Stackelberg (1937) described *A. (P.) astigmatica* in Russian (p. 123) and in German

(p. 133), because a part of the paper was simultaneously published in two languages and both versions of the description are identical. In the Russian version he notes that P.A. Petrishtsheva found several specimens but in the German version four males and one female are indicated.

Stackelberg (1937) clearly designates a “type”; i.e., holotype, and the entire series was listed as housed in the Zoological Institute, St. Petersburg, Russia (ZIN), where two male specimens were found; one specimen in the general Empididae collection and one specimen in a box with materials of P.A. Petrishtsheva, both are definitely conspecific and undoubtedly originates from series noted by Stackelberg in his paper. However, none of these specimens bear an identification or type label of Stackelberg (Fig. 1).

On the basis of the male terminalia and specifically the clasping cercus, this species is conspecific with *Wiedemannia lota* Walker, 1851 (Figs 1–2). For this reason we propose that *W. astigmatica* is a junior synonym of *W. lota* (**syn. nov.**). *Wiedemannia lota* is widespread in the Palaearctic Region from Ireland to central Asia (Tajikistan) (Chvála & Wagner 1989; Shamshev 2016).

The French dipterist F. Vaillant borrowed from ZIN a collection of Clinocerinae collected in Middle Asia. In the resulting paper (Vaillant 1960) he notes two males and one female specimen collected by Petrishtsheva from Kara-Kala, but did not recognize them as type specimens. Vaillant identified these specimens as *W. lota*. One of these male specimens was returned to the general Empididae collection of ZIN with Vaillant’s determination label attached. Vaillant retained two males from the series, which are now housed in Musée cantonal de zoologie,



Figs 1–3. *Atalanta astigmatica* Stackelberg, 1937 (= *Wiedemannia lota* Walker, 1851). **1.** Paratype male, habitus in lateral view and labels; **2.** Paratype male, habitus, dorsolateral view; **3.** Labels of holotype.

Lausanne, Switzerland (MZLS). One of these male specimens included a Stackelberg identification label (Fig. 3), which clearly identifies it as the holotype of *A. astigmatica*. Stackelberg (1937) stated that the series was collected in September (IX), but the holotype is labelled August (VIII), which we consider an oversight by the author. Apparently, Vaillant overlooked the type status of this specimen. He (Vaillant 1960) made no mention of Stackelberg's paper with the description of *A. astigmatica* and probably was unaware that it was an available name.

***Wiedemannia lota* Walker, 1851: 107.**

Atalanta (Philolutra) astigmatica Stackelberg, 1937: 123. Type locality: "Kara-Kala" (= Magtymguly, 38°26'N 56°18'E), Turkmenistan. **Syn. nov.**

Type material examined.

Holotype. Male, labelled (Fig. 1C): "[printed in Cyrillic, Russian] Kara-kala [now Magtymguly], Syumy/ Turkmeniya [= Turkmenistan] VIII –/ Petrishtsheva [1]931"; "Atalanta Typ. '33/ astigmatica sp.n./ Stackelberg det."; "Wiedemannia/ (Chamaedipsia)/ lota HALIDAY/ ♂/ F. VAILLANT dét. [yellow label]" (ZIN) [currently housed in MZLS].

Paratypes. Same data as for holotype, except collected in IX (2 ♂♂, ZIN, 1 ♂♂, MZLS).

Acknowledgements. Jean-Luc Gattolliat (MZLS) kindly assisted us in locating two males from the type series donated by F. Vaillant to his Museum and provided the photo of the holotype labels. Alexey Kovalev (ZIN) kindly produced photos of the habitus of the paratype. The study of Igor Shamshev was performed within the frames of the Russian State Research Project No AAAA-A19-119020690101-6 and supported by the Russian Foundation for Basic Research (grant no. 18-04-00354A).

REFERENCES

- Chvála M, Wagner R (1989) Empididae. Pp. 228–336 in: Soós A & Papp L (eds) Catalogue of Palaearctic Diptera, Volume 6, Therevidae – Empididae. Elsevier Science Publishing, Amsterdam
- Evenhuis NL, Pape T (2017) Battling the un-dead: the status of the Diptera genus-group names originally proposed in Johann Wilhelm Meigen's 1800 pamphlet. *Zootaxa* 4275: 1–74
- Evenhuis NL, Pape T (eds) (2019) Systema Dipteroorum, Version 2.2. Online at <http://sd.zoobank.org/>, accessed on May 14, 2019
- Shamshev IV (2016) An annotated checklist of empidooid flies (Diptera: Empidoidea, except Dolichopodidae) of Russia. *Proceedings of the Russian Entomological Society* 87: 3–183
- Stackelberg AA (1937) Neue Dipteren-arten aus Höhlen de Vertebrata Turkmeniens und angrenzenden Länder Mittel Asiens. *Trudy soveta po izucheniyu estestvennykh proizvoditelnykh sil. Seria Turkmenskaya* 9: 121–139 [In Russian with German descriptions]
- Vaillant F (1960) Quelques Empididae Atalantinae d'Asie russe [Dipt.]. *Bulletin de la Société entomologique de France* 65: 170–186
- Walker F (1851) *Insecta Britannica*. Diptera. Volume 1. Reeve & Benham, London
- Yang D, Zhang K, Yao G, Zhang J (2007) World Catalog of Empididae (Insecta: Diptera). China Agricultural University Press, Beijing