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Revision of the aquatic dance flies (Diptera: Empididae: Clinocerinae) described by F. Vaillant in two 1960 publications

Bradley J. Sinclair^{1,*}, Igor V. Shamshev² & Jean-Luc Gattolliat³

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, RU-199034, Russia

³Musée Cantonal de Zoologie, Palais de Rumine, 1015 Lausanne, Switzerland; Department of Ecology and Evolution, Biophore, University of Lausanne, CH-1015 Lausanne, Switzerland

*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)

³[urn:lsid:zoobank.org:author:9F2CBF71-33B8-4CD7-88D3-85D7E528AEA5](https://zoobank.org/author:9F2CBF71-33B8-4CD7-88D3-85D7E528AEA5)

Abstract. The specimens from two 1960 publications by François Vaillant on aquatic empidids (Diptera: Empididae: Clinocerinae) are examined. Lectotypes are designated for *Atalanta minutissima* Vaillant, 1960, *A. orientalis* Vaillant, 1965, *A. stackelbergi* Vaillant, 1960, *Oreothalia rupestris* Vaillant, 1960, *Wiedemannia bicolorata* Vaillant, 1960, *W. foliacea* Vaillant, 1960, *W. fumosa* Vaillant, 1960, *W. saltans* Vaillant, 1960, *W. similis* Vaillant, 1960, *Seguyella rostrata* Vaillant, 1960 and *S. tadjikistana* Vaillant, 1960. The following taxonomic changes are proposed: *Atalanta nigra orientalis* Vaillant, 1965 is now *Clinocera orientalis* (Vaillant, 1965), stat. rev. and *Clinocera vaillantiana* sp. nov. is named for *Atalanta (Atalanta) rufipes sensu* Vaillant.

Key words. Palaearctic, Nearctic, new species, lectotypes, aquatic dance flies.

INTRODUCTION

The French entomologist François Vaillant (1920–) described a series of new species of aquatic empidids (Clinocerinae) in two 1960 publications. Vaillant (1960a) listed new distribution records and described three new species from specimens he collected in Tennessee, USA and later Vaillant (1960b) published new species records, a new genus and eight new species from Kazakhstan, Tajikistan and Turkmenistan from specimens borrowed from the Zoological Institute of Russian Academy of Sciences in St. Petersburg. In the latter publication, a portion of the specimens upon which these species were based were retained in his private collection and most of the loaned material was returned. Unfortunately, the material that was returned was inadequately labelled and determination of the type status was hindered by the inability to assemble the entire type series for each species.

Between 2010 and 2013, the private Diptera, Coleoptera and Trichoptera collections of François Vaillant, representing around 12,000 slides and numerous pinned specimens, were donated to the Musée cantonal de zoologie, Lausanne, Switzerland (MZLS). Among this valuable collection were around 1,300 slides of Empididae including type material for about 70 species. This study

of the Clinocerinae specimens from the 1960 publications was initiated to answer several long outstanding questions for BJS and IVS and represents only a small portion of the aquatic dance fly collection. This is a follow-up study to Sinclair & Shamshev (2019) which investigated only a short series of specimens determined as *Wiedemannia lota* Walker, 1851. Much work remains in identifying all the type specimens from this vast donation.

MATERIAL AND METHODS

This study is based on material housed in the Musée cantonal de zoologie, Lausanne, Switzerland (MZLS) and the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZIN).

The label data for type specimens are cited verbatim and listed beginning with the top label continuing to the bottom label. Data on labels are listed within quotation marks, with a change in label represented by a semicolon. A new line on a label is indicated by a slash (/). Any additional information not found on the labels is given in square brackets.

The status of the type material of the new species described in Vaillant (1960a, b) was not distinctly outlined.

For several species there was no statement concerning name-bearing types and in these cases all specimens listed are treated as syntypes according to the International Code of Zoological Nomenclature (ICZN 1999) Article 73.2.1. In most cases, Vaillant (1960a, b) used the expression “type choisi du ...” to indicate either the type locality or the collection locality of a type specimen, and in our opinion this was not an explicit statement of type fixation. The identification of the name-bearing specimen was further inhibited by the lack of explicit labelling. Although all specimens examined by us bear Vaillant’s determination label, no “type” labels were attached. The ICZN (1999) Article 73.1.1 states: “If an author when establishing a new nominal species-group taxon states in the original publication that one specimen, and only one, is the holotype, or “the type” [French version of ICZN: “le type”], or uses some equivalent expression, that specimen is the holotype fixed by original designation”. On the basis of the use of the above expression by Vaillant without a definite article, in combination with the absence of type labelling, we interpret that a particular name-bearing specimen was not established in these publications. All specimens listed by Vaillant under material examined sections are treated as syntypes. A similar interpretation of type material status was discussed by Richet et al. (2013).

RESULTS

Material from Vaillant (1960a)

During a visit to Tennessee (USA) in August 1955, Vaillant collected aquatic insects from streams and waterfalls in Great Smoky Mountains National Park of Tennessee and North Carolina (USA). This material later formed the basis of several publications on Thaumaleidae (Vaillant 1959a), Psychodidae (Vaillant 1959b) and Clinocerinae (Empididae) (Vaillant 1960a). In the latter publication, Vaillant (1960a) described three new species. The following species were listed in this publication and all specimens associated with his identifications were studied if available. All material was poorly labelled in terms of type material and the depository of the types was not specified in the publication. Fortunately, Vaillant’s descriptions and illustrations have readily facilitated species identification by subsequent taxonomists without the need for direct comparisons with type specimens.

Clinocera sp.

Atalanta (Hydrodromia) sp.: Vaillant, 1960a: 119.

Material. Le Comte, 10.viii.1955 (1 ♀).

Remarks. The genus name *Atalanta* Meigen, 1800 was suppressed by the ICZN (1963) and Sinclair (1995) listed the subgenus *Hydrodromia* Macquart, 1835 as a junior synonym of *Clinocera* Meigen, 1803.

The single female specimen listed by Vaillant (1960a) was not found among the donated collection.

Roederiodes recurvatus Chillcott, 1961

(Fig. 1)

Roederiodes recurvatus Chillcott, 1961: 424. Type locality: Old Chelsea, Quebec, Canada.

R. recurvatus: Melander, 1965: 468 (catalogue); Wilder, 1981a: 419 (review); Sinclair, 1995: 698 (checklist).

Roederiodes junctus Coquillett, 1901: Vaillant, 1960a: 117 (not Coquillett) (Wilder 1981a: 419).

Material examined. USA. Tennessee: Roaring Fork Creek [near Gatlinburg, 600 m], 20.viii.1955, F. Vaillant (slides: GBIFCH00606816: 1 ♂, 2 ♀♀; GBIFCH00606817: 1 ♂; GBIFCH00606818: 2 ♂♂; pinned: GBIFCH00654925: 1 ?♂ [abdomen missing]; all MZLS).

Remarks. Vaillant (1960a) identified and labelled the above material as *Roederiodes junctus* (Fig. 1). This was a misidentification of *R. recurvatus* (see Chillcott 1961: fig. 17).

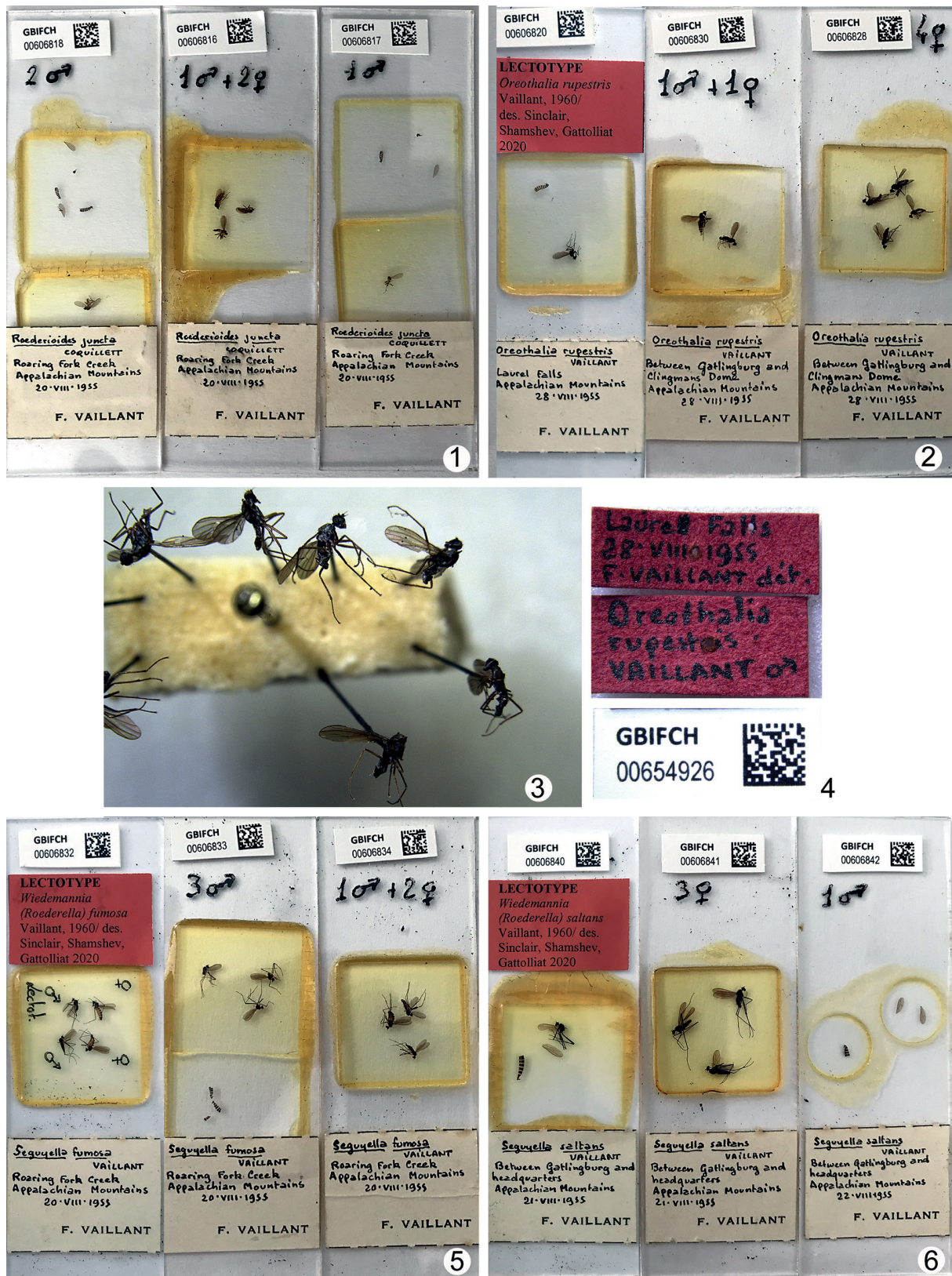
Oreothalia rupestris Vaillant, 1960

(Fig. 2)

Oreothalia rupestris Vaillant, 1960a: 118. Type locality (by lectotype designation): Laurel Falls, Tennessee, USA.

O. rupestris: Melander, 1965: 467 (catalogue); Wilder, 1981b: 463 (revision); Sinclair, 1995: 696 (checklist).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled (Fig. 2): “GBIFCH/ 00606820”; “LECTOTYPE/ *Oreothalia rupestris*/ Vaillant, 1960// des. Sinclair,/ Shamshiev, Gattolliat/ 2020 [red label]”; “*Oreothalia rupestris*/ VAILLANT/ Laurel Falls/ Appalachian Mountains/ 28.VIII.1955, F. VAILLANT” (MZLS, slide). **PARALECTOTYPES: USA. Tennessee:** same data as lectotype except, GBIFCH00606821 (1 ♂, MZLS, slide); same data except, GBIFCH00606822 (1 ♂, MZLS, slide); same data except, GBIFCH00606823 (1 ♂, 1 ♀, MZLS, slide); same data except, GBIFCH00606824 (1 ♂, 1 ♀, MZLS, slide); same data except, GBIFCH00606825



Figs 1–6. Specimens from Vaillant (1960a). 1. *Roederioides junctus* (= *R. recurvatus* Chillcott), three slides. 2. *Oreothalia rupestris* Vaillant, lectotype and two paralectotype slides. 3. *O. rupestris* Vaillant, pinned males. 4. *O. rupestris* Vaillant, labels on pin. 5. *Wiedemannia fumosa* Vaillant (= *Trichoclinocera fumosa*), lectotype and two paralectotype slides. 6. *Wiedemannia saltans* Vaillant (= *Trichoclinocera hamifera* (Melander)), lectotype and two paralectotype slides.

(1 ♂, 1 ♀, MZLS, slide); same data except, GBIF-CH00606826 (1 ♂, MZLS, slide); same data except, GBIFCH00606827 (1 ♂, 1 ♀, MZLS, slide); Gatlinburg to Clingmans Dome Rd., 900 m, 28.viii.1955, F. Vaillant (slides: GBIFCH00606828: 4 ♀♀, GBIFCH00606829: 1 ♂, GBIFCH00606830: 1 ♂, 1 ♀; all MZLS); Mt. Le Conte, 10.viii.1955, 1950 m, F. Vaillant (slide: GBIF-CH00606831: 1 ♂, MZLS).

Additional material. USA. Tennessee: Laurel Falls, 28.viii.1955, F. Vaillant (pinned: GBIFCH00654926: 8 ♂♂, GBIFCH00654927: 9 ♀♀, MZLS; 3 empty pins without specimens, ZIN).

Remarks. Vaillant (1960a) designated Laurel Falls as the type locality (8 males and 4 females) and all specimens were found mounted on slides, but the collection date was published as 20 August instead of 28 August as stated on the labels (Fig. 2). The pinned specimens from Laurel Falls (Figs 3, 4) listed under Additional material were not reported among the material examined by Vaillant (1960a) and are not considered part of the original syntype series. Vaillant donated some specimens to ZIN but we found only empty pins.

Oreothalia rupestris is the only described species of this endemic Nearctic genus in the East, occurring only in the Great Smoky Mountains (Wilder 1981b; Sinclair unpubl. data). There is a probable undescribed species based on a single female specimen from Gainesville, Florida, distinguished from *O. rupestris* on the basis of wing venation, pleural colouration and chaetotaxy (Sinclair 1995).

***Trichoclinocera fumosa* (Vaillant, 1960)**
(Fig. 5)

Wiedemannia (*Roederella*) *fumosa* Vaillant, 1960a: 119.

Type locality (by lectotype designation): Roaring Fork Creek, Great Smoky Mountains, Tennessee, USA.

W. (*Roederella*) *fumosa*: Melander, 1965: 469 (catalogue).

Seguyella fumosa (Vaillant): Vaillant, 1960b: 180 (new combination).

Trichoclinocera fumosa (Vaillant): Sinclair, 1994: 1029 (new combination, revision).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled (Fig. 5): “GBIFCH/ 00606832”; “LECTOTYPE/ *Wiedemannia* (*Roederella*) *fumosa*/ Vaillant, 1960/ des./ Sinclair, Shamshev,/ Gattolliat 2020 [red label]”; “*Seguyella fumosa*/ VAILLANT/ Roaring Fork Creek/ Appalachian Mountains [Great Smoky Mountains National Park]/ 20.VIII.1955/ F. VAILLANT” (MZLS, upper left specimen). **PARALECTOTYPES: USA. Tennessee:** on same slide as lectotype (1 ♂, 2 ♀♀, MZLS, slide);

same data except, GBIFCH00606833 (3 ♂♂, MZLS, slide); same data except, GBIFCH00606834 (1 ♂, 2 ♀♀, MZLS, slide); same data except, GBIFCH00606835 (1 ♂, 2 ♀♀, MZLS, slide); same data except, GBIF-CH00606836 (2 ♂♂, 3 ♀♀, MZLS, slide); Little River, 3000 ft [1100 m, F. Vaillant], GBIFCH00654928 (1 ♂, 1 ♀, MZLS, pinned together on single mount).

Remarks. Vaillant (1960a) designated Roaring Fork Creek as the type locality (16 males and 24 females) and 10 males and 8 females were located for this study.

Vaillant (1960b) transferred *Wiedemannia fumosa* to a new genus, *Seguyella* Vaillant, 1960b, which is now classified as a junior synonym of *Trichoclinocera* Collin, 1941 (Sinclair 1994). This species was transferred to *Trichoclinocera* and redescribed by Sinclair (1994), where the species was shown to occur primarily in the southern Appalachian Mountains from Virginia to northern Georgia.

***Trichoclinocera hamifera* (Melander, 1928)**
(Fig. 6)

Wiedemannia (*Chamaedipsia*) *hamifera* Melander, 1928: 233. Type locality: Beaverkill, New York, USA.

Wiedemannia (*Roederella*) *saltans* Vaillant, 1960a: 122. Type locality (by lectotype designation): near Gatlinburg, Tennessee, USA.

Wiedemannia (*Chamaedipsia*) *saltans*: Melander, 1965: 469 (catalogue).

Seguyella saltans (Vaillant): Vaillant, 1960b: 180 (new combination).

Trichoclinocera hamifera (Melander): Sinclair, 1994: 1030 (new synonym, revision).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled (Fig. 6): “GBIFCH/ 00606840’ 1 ♂”; “LECTOTYPE/ *Wiedemannia* (*Roederella*) *saltans*/ Vaillant, 1960/ des./ Sinclair, Shamshev,/ Gattolliat 2020 [red label]”; “*Seguyella saltans*/ VAILLANT/ Between Gatlinburg and headquarters [Great Smoky Mountains National Park]/ Appalachian Mountains/ 21.VIII.1955/ F. VAILLANT” (MZLS, slide). **PARALECTOTYPES: USA. Tennessee:** same data as lectotype except, GBIFCH00606841 (3 ♀♀, MZLS, slide); same data except, 22.viii.1955, GBIFCH00606842 (1 ♂, MZLS, slide); Greenbrier Cove [600 m], 17.viii.1955, F. Vaillant (slides: GBIF-CH00606837: 3 ♀♀; GBIFCH00606838: 1 ♂; GBIF-CH00606839: 2 ♀♀, all MZLS).

Remarks. Vaillant (1960a) designated “between Gatlinburg, Tennessee and the headquarters of the Great Smoky Mountains National Park” (3 males, 3 females) as the type locality and 2 males and 3 females were located for this study.

Vaillant (1960b) transferred *Wiedemannia saltans* to the new genus *Seguyella*. This genus is a junior synonym of *Trichoclinocera* Collin and *S. saltans* is a junior synonym of *Trichoclinocera hamifera* (Sinclair 1994).

Trichoclinocera sp.

Wiedemannia (Philolutra) sp.: Vaillant, 1960a: 123.

Material. Between Gatlinburg and National Park headquarters, 22.viii.1955 (7 ♀♀).

Remarks. The seven female specimens identified by Vaillant were not found among the donated collection. The genus *Wiedemannia* Zetterstedt, 1838 does not occur in the southern Appalachians and we assume that these specimens belong to *Trichoclinocera*. There are at least four species of *Trichoclinocera* present in the southern Appalachian Mountains including *T. falcata* Sinclair, 1994 and *T. minor* (Melander, 1928), in addition to the two species above (Sinclair 1994).

Material from Vaillant (1960b)

Vaillant (1960b) borrowed a series of Clinocerinae specimens collected in central Asia from A.A. Stackelberg (ZIN). Vaillant (1960b) described eight new species, identified four additional species of Clinocerinae and described a new genus, *Seguyella*. Vaillant returned a portion of the original loan and retained an unknown number of specimens from his study for his private collection. All material was poorly labelled in terms of type material and the depository of the types was not specified. Fortunately, Vaillant's descriptions and illustrations have readily facilitated species identification by subsequent taxonomists without the need for direct comparisons with type specimens.

Clinocera minutissima (Vaillant, 1960)

(Fig. 15)

Atalanta (Atalanta) minutissima Vaillant, 1960b: 172.

Type locality (by lectotype designation): Khorog on Gunt River (37°29'N 71°33'E), Tajikistan.

Clinocera minutissima (Vaillant): Chvála & Wagner, 1989: 330 (catalogue); Sinclair, 1995: 693 (checklist).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled (Fig. 15): [printed in Cyrillic] [Tajikistan]: “Khorog on r. [=reka, river] Gunt/ Shugnan, 25.ix.[1]943./ Stackelberg”; “LECTOTYPE/ *Atalanta (Atalanta) minutissima* Vaillant, 1960/ des. Sinclair, Shamshev, Gattolliat 2020 [red label]”; “GBIFCH/ 00596473”; “*Atalanta (Atalanta) minutissima* VAILLANT ♂/ Khorog, Pamir/ occidental. Tadzikistan/ 25.IX.1943/ A.A. STACKELBERG

coll./ F. VAILLANT [hand-written by Vaillant]” (1 ♂, MZLS). **PARALECTOTYPES:** same data as lectotype (2 ♂♂, MZLS, slides; 1 ♀, ZIN, pinned).

Remarks. Vaillant (1960b) designated the locality “Khorog” as the type locality, which included two males and two females. We identified three males and one female from the type series. Vaillant (1960b) also listed a single female from “Kondara”, but this specimen was not found in either MZLS or ZIN.

Sinclair (1995) assigned this species to the *C. lineata* group on the basis of the form of the surstylus (Sinclair 2008). Many species in this group, including *C. minutissima*, possess facial setulae (defining feature of genus *Kowarzia* Mik, 1882), but the male terminalia clearly identify them as belonging to the genus *Clinocera*.

Clinocera orientalis (Vaillant, 1965) stat. rev.

(Figs 7–10)

Clinocera nigra Meigen, 1804: Vaillant, 1960b: 174 (as *Atalanta (Atalanta)*).

Atalanta nigra orientalis Vaillant, 1965: 148. Type locality (by lectotype designation): Kondara Canyon, valley of Varzob River (38°48'N 68°48'E), Tajikistan.

Clinocera nigra orientalis (Vaillant): Sinclair, 1995: 693 (checklist).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled: “[printed in Cyrillic] [Tajikistan] *Atalanta (Atalanta) nigra* (Meigen)/ ♂ [hand-written by Vaillant, yellow label]”; “usch. [=uschelje, canyon] Kondara, dol. [=dolina, valley]/ r. [=reka, river] Varzob, Taj. [=Tajikistan]/ Stackelberg 6.xi.[1]944”; “Lectotypus/ *Atalanta nigra orientalis* Vaillant, 1965/ design. Sinclair, Shamshev, Gattolliat 2020” (ZIN, INS_DIP_0000606). **PARALECTOTYPE:** same data as lectotype, GBIFCH00596472 (1 ♂, slide, MZLS).

Remarks. Vaillant (1960b) initially identified nine specimens from Tajikistan as *C. nigra* Meigen. Vaillant (1965) later re-evaluated his decision and concluded that these Central Asian specimens differed in the male genitalia and named a new subspecies (as *A. (A.) nigra orientalis*) for these specimens. No type or type locality was designated for this new subspecies. We consider the male genitalia of *C. nigra orientalis* (see Vaillant 1965: figs 11, 1m) are sufficiently different from *C. nigra* to warrant elevation to species. Only two of nine specimens listed in Vaillant (1960b) could be found of this species.



Figs 7–10. *Clinocera orientalis* (Vaillant) stat. rev., male paralectotype. 7. Slide. 8. Terminalia. 9. Habitus. 10. wing.

***Clinocera stackelbergi* (Vaillant, 1960)**

(Fig. 16)

Atalanta (*Kowarzia*) *stackelbergi* Vaillant, 1960b: 174.

Type locality (by lectotype designation): Khorog on river Gunt (37°29'N 71°33'E), Tajikistan.

Clinocera (*Kowarzia*) *stackelbergi* (Vaillant): Chvála & Wagner, 1989: 334 (catalogue).

Clinocera stackelbergi (Vaillant): Sinclair, 1995: 693 (checklist).

Type material examined. **LECTOTYPE** (here designated in order to fix identity of the species), ♂ labelled (Fig. 16): “*Atalanta* (*Kowarzia*) *stackelbergi*/ VAILLANT/ ♂/ F. VAILLANT det. [yellow label, hand-written by Vaillant]”; “[printed in Cyrillic] Khorog na r. [na reke, =on river] Gunt/ Shugnan 25.ix.[1]943, Stackelberg”; “LECTOTYPUS/ *Atalanta* (*Kowarzia*) *stackelbergi* Vaillant, 1960/ des. Sinclair, Shamshev, Gattolliat/ 2020 [red label]” (ZIN, INS_DIP_0000607). **PARALECTOTYPES:** **Tajikistan:** same data as lectotype (2 ♂♂, 1 ♀, ZIN; GBIFCH00602303:1 ♂, MZLS, slide); same data as lectotype except, 26.ix.1943 (1 ♂, ZIN); Kondara Canyon, valley of river Varzob, Stackelberg, 6.xi.1944, GBIFCH00602304 (1 ♂, MZLS, slide).

Remarks. Vaillant (1960b) did not designate a type specimen or type locality for this species. A total of six male and two female syntypes were listed, and six male and one female syntypes were found during this study.

Despite the presence of facial setulae, a defining character of the genus *Kowarzia*, Sinclair (1995) transferred this species to *Clinocera* and assigned it to the *C. lineata* group on the basis of male terminalia.

***Clinocera stagnalis* (Haliday, 1833)**

Heleodromia stagnalis Haliday, 1833: 159. Type locality: Holywood, Downshire, Ireland.

Material examined. Tajikistan: Stalinabad [=Dushanbe] valley of Gulbisty River, 20.iv.1943 (1 ♂, ZIN); Stalinabad [=Dushanbe], loess hills, 24.iv.1943, Stackelberg (1 ♀, ZIN), 5.iv.1944 (1 ♀, ZIN); Stalinabad [=Dushanbe], foothills, 18.iv.1943, Goussakovsky (1 ♀, ZIN); Tavil-dara, N slope of Darvazskiy Ridge, 10.x.1942 (1 ♂, ZIN); Viskharvi on Pyandzh River, 21.x.1942, Stackelberg (1 ♂, ZIN).

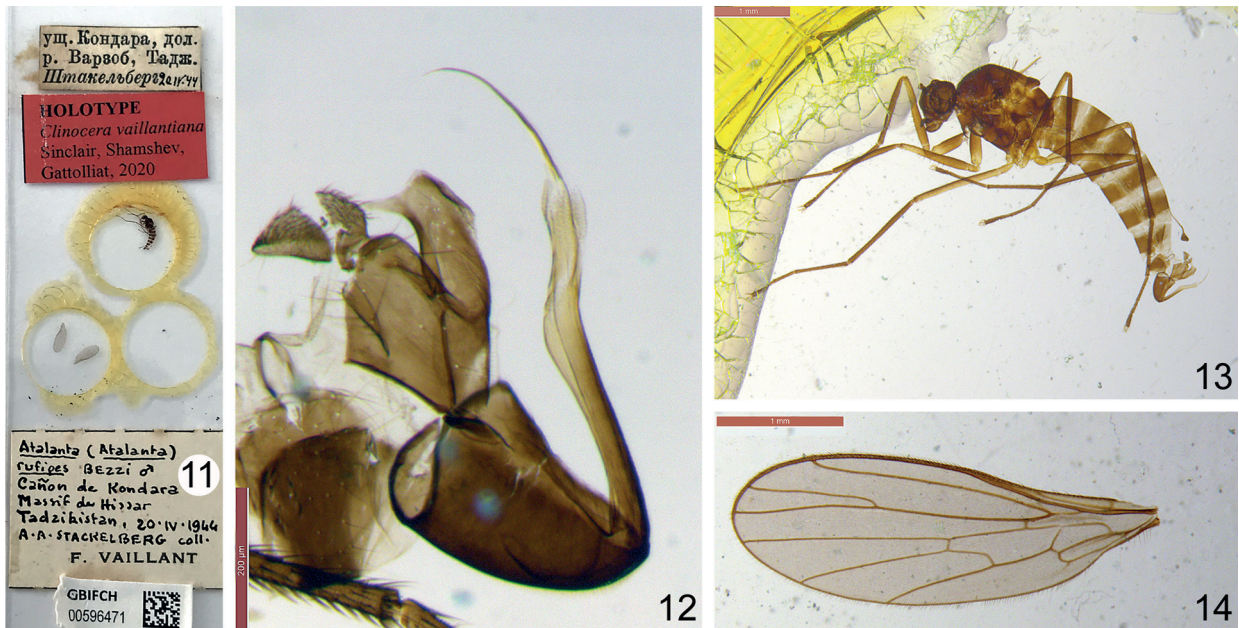
Remarks. This is a very widespread species, found across the Palaearctic Region and the arctic and Rocky Mountains of the Nearctic Region (Sinclair 2008).

***Clinocera vaillantiana* sp. nov.**

(Figs 11–14)

Atalanta (*Atalanta*) *rufipes* Vaillant, 1960b: 174 (not Bezzi).

Type material examined. HOLOTYPE ♂, labelled (Fig. 11): “[printed in Cyrillic] [Tajikistan] usch. [=us-



Figs 11–14. *Clinocera vaillantiana* sp. nov., male holotype. 11. Slide. 12. Terminalia. 13. Habitus. 14. wing.

chelje, canyon] Kondara, dol. [=dolina, valley]/ r. [=reka, river] Varzob, Taj. [=Tajikistan]/ Stackelberg 20.iv. [19]44"; "HOLOTYPE/ *Clinocera vaillantiana*/ Sinclair, Shamshev, Gattolliat, 2020"; "Atalanta (Atalanta) rufipes Bezzi ♂/ Cañon de Kondara/ Massif de Hissar/ Tadzikistan, 20.IV.1944/ A.A. STACKELBERG coll./ F. VAILLANT"; "GBIFCH/ 00596471" (MZLS, slide).

Description. Male. Head with broad face; ocellar seta 3/4 length of scutal setae; postpedicel short ovate; arista-like stylus slender. Scutum with long setae; subequal in length with scutellar setae; 1 postpronotal seta weaker than notopleural setae; 1 presutural postalar seta; 2 notopleural setae; 1 postsutural postalar seta; 6 dorsocentral setae. Legs with coxae and femora pale brown (Fig. 13); remaining legs dark brown; fore femur with biserial row of ventral setae, setae half as long as width of femur; fore tibia with erect ventral setae. Wing infusate (Fig. 14), lacking spots or clouding; pterostigma absent; auxiliary crossveins absent; cell dm produced distally; halter pale brown.

Male terminalia (Fig. 12; Vaillant 1960b: figs 2c–f): Clasper oval, strongly tapered apically. Surstylus digitiform with sharply pointed subapical process. Phallus slightly sinuous, not expanded apically; distiphallus slender and arched.

Etymology. This species is a patronym in honour of François Vaillant in recognition of his efforts to describe the diversity of aquatic empidids and he will be 100 years of age in 2020.

Remarks. Vaillant (1960b: figs 2c–f) considered the single specimen he identified as *Atalanta (Atalanta) rufipes* (Bezzi, 1899) to be significantly different from *C. nigra rufipes* [originally *Atalanta (Atalanta) nigra rufipes*] and consequently elevated *rufipes sensu* Vaillant to species level. Sinclair (2007) examined syntype specimens of *C. rufipes* Bezzi and proposed this species as a junior synonym of *C. nigra*. On the basis of the illustration of the male genitalia of *C. rufipes* in Sinclair (2007: fig. 1), the male genitalia of this Central Asian specimen (Vaillant 1960b: figs 2c–f; Fig. 12) is clearly not conspecific, and represents a new species described herein.

***Trichoclinocera cyanescens* (Vaillant, 1960)**
(Fig. 17)

Seguyella cyanescens Vaillant, 1960b: 180. Type locality: "Tavilj Dara" [= Tavildara] (38°41'N 70°29'E), Tajikistan.

Seguyella cyanescens: Chvála & Wagner, 1989: 322 (catalogue).

Trichoclinocera cyanescens (Vaillant): Sinclair, 1994: 1015 (new combination).

Type material examined. HOLOTYPE ♂, labelled (Fig. 17) [printed in Cyrillic] [Tajikistan]: "Tavil-dara [=Tavildara, 38°41'N 70°29'E], N/ skl. [=sklon, slope] Darvaz. [=Darvazskiy] khr. [=khrebet, ridge] 9,x/ Stackelberg [1]942"; "GBIFCH/ 00606848"; "HOLOTYPE/ Seguyella cyanescens/ Vaillant, 1960"; "Seguyella cyanescens/ VAILLANT ♂/ Tavilj Dara, Massif de/ Darvaz.

Tadzikistan/ 9.X.1942/ A.A. STACKELBERG coll./ F. VAILLANT" (MZLS, slide).

Remarks. This species was described on the basis of a single male specimen. Vaillant removed this specimen from the pin and made a slide mount, including the original locality label. A holotype label has been attached.

Trichoclinocera rostrata (Vaillant, 1960)
(Fig. 18)

Seguyella rostrata Vaillant, 1960b: 181. Type locality (by lectotype designation): Kondara Canyon, valley of river Varzob (38°48'N 68°48'E), Tajikistan.

Seguyella rostrata: Chvála & Wagner, 1989: 322 (catalogue).

Trichoclinocera rostrata (Vaillant): Sinclair, 1994: 1016 (new combination).



Figs 15–19. Specimens from Vaillant (1960b). 15. *Clinocera minutissima* (Vaillant), lectotype and two paralectotype slides. 16. *Clinocera stackelbergi* (Vaillant), lectotype and labels. 17. *Seguyella cyanescens* Vaillant (= *Trichoclinocera cyanescens*), holotype slide. 18. *Seguyella rostrata* Vaillant (= *Trichoclinocera rostrata*), two paralectotype slides. 19. *Seguyella tadjikistana* Vaillant (= *Trichoclinocera tadjikistana*), paralectotype slide.

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled [printed in Cyrillic] [Tajikistan]: “Seguyella/ rostrata/ VAILLANT/ ♂/ F. VAILLANT det. [yellow label, hand-written by Vaillant]”; “usch. [=uschelje, canyon] Kondara, dol. [=dolina, valley]/ r. [reka, river] Varzob, Tadj. [=Tajikistan]/ Stackelberg 20.iv.[19]44”; “Trichoclinocera/ rostrata/ det. B.J. Sinclair 1993”; “LECTOTYPUS/ Seguyella/ rostrata Vaillant/ des. Sinclair, Shamshev, Gattolliat 2020 [red label]” (ZIN, INS_DIP_0000608). **PARALECTOTYPES: Tajikistan:** same data as lectotype (2 ♂♂, 7 ♀♀, ZIN); same data as lectotype (Fig. 18) (slides: GBIFCH00606849: 1 ♂; GBIFCH00606850: 1 ♂; pinned: GBIFCH00654933: 1 ♀; GBIFCH00654934: 1 ♀; GBIFCH00654935: 1 ♂; all MZLS).

Remarks. Vaillant (1960b) did not designate a type specimen for this species and examined a total of six male and 11 female specimens (= syntypes), of which six males and nine females were found during this study. Sinclair (1994) transferred this species to the genus *Trichoclinocera* after studying two male and two female syntype specimens borrowed from ZIN, but a lectotype was not designated by Sinclair (1994).

***Trichoclinocera tadjikistana* (Vaillant, 1960)**
(Fig. 19)

Seguyella tadjikistana Vaillant, 1960b: 184. Type locality (by lectotype designation): Dushanbe, Tajikistan.

Seguyella tadjikistana: Chvála & Wagner, 1989: 322 (catalogue).

Trichoclinocera tadjikistana (Vaillant): Sinclair, 1994: 1016 (new combination).

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled [printed in Cyrillic]: “Seguyella/ tadjikistana/ VAILLANT/ #m/ F. Vaillant dét. [yellow label]”; “Stalinabad [= Dushanbe]/ Tajik. [= Tajikistan] predgorja [= foothills], Goussakovsky 18.iv.[19]43,”; “Trichoclinocera/ tadjikistana/ Det. B.J. Sinclair 1993”; “LECTOTYPUS/ Seguyella/ tadjikistana Vaillant/ des. Sinclair, Shamshev, Gattolliat 2020 [red label]” (ZIN, INS_DIP_0000609). **PARALECTOTYPES: Tajikistan:** same data as lectotype (1 ♀, ZIN); Viskharvi on Pyandzh River, Tajikistan, 21.x.1942, Stackelberg (1 ♀, ZIN); Tavil-dara, N slope of Darvazskiy Ridge, 7–11.x.1942, A.A. Stackelberg (1 ♂, 4 ♀♀, ZIN; ♂ examined and dissected by B.J. Sinclair); same data except, GBIFCH00606851 (Fig. 19) (1 ♂, MZLS, slide).

Remarks. Vaillant (1960b) designated Viskharvi as the type locality, which was represented by one male and one female specimen. Only the female specimen was

found and the male specimen appears to be lost. We have chosen a lectotype male from Dushanbe, which is some 200 km east of Viskharvi.

Sinclair (1994) transferred this species to the genus *Trichoclinocera* after studying two male and two female syntype specimens borrowed from ZIN, but did not designate a lectotype.

***Wiedemannia bicolorata* Vaillant, 1960**
(Fig. 20)

Wiedemannia (Chamaedipsia) bicolorata Vaillant, 1960b: 175. Type locality (by lectotype designation): Kondara Canyon, valley of Varzob River, Tajikistan.

Wiedemannia (Chamaedipsia) bicolorata: Chvála & Wagner, 1989: 325 (catalogue); Sinclair, 1995: 713.

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled [printed in Cyrillic]: “Wiedemannia/ (Chamaedipsia)/ bicolorata/ VAILLANT/ ♂/ F. Vaillant dét. [yellow label]”; “usch. [=uschelje, canyon] Kondara, dol./ r. [= dolina reki, valley of river] Varzob, Taj. [= Tajikistan]/ Stackelberg 7.xi.[1]944”; “LECTOTYPUS/ Wiedemannia (Chamaedipsia)/ bicolorata Vaillant/ des. Sinclair, Shamshev, Gattolliat 2020 [red label]” (ZIN, INS_DIP_0000610). **PARALECTOTYPES: Tajikistan:** same data as lectotype (1 ♂, 3 ♀♀, ZIN; including 1 ♂ and 1 ♀ on one pin); Rakhaty, Gissarskaya valley, 5.viii.1943, Stackelberg (3 ♀♀, ZIN, pinned); Tavil-dara, N slope of Darvazskiy Ridge, 7.x.1942, Stackelberg (1 ♂, ZIN, pinned); Viskharvi on Pyandzh River, 21.x.1942, A.A. Stackelberg, GBIFCH00606843 (1 ♂; MZLA, slide); same data except, GBIFCH00606844 (1 ♂, MZLS, slide); same data except, GBIFCH00654930 (1 ♂, MZLS, pinned); Kovron, near Kalay-khumb, 20.x.1942, A.A. Stackelberg, GBIFCH00654929 (1 ♀, MZLS, pinned; 1 ♀, ZIN).

Remarks. Vaillant (1960b) designated “Canon de Kondara” as type locality and he studied three males and four females, of which two male and three female specimens were found during this study. Several pairs of facial setae are present on a number of specimens.

***Wiedemannia fallaciosa* (Loew, 1873)**

Clinocera fallaciosa Loew, 1873: 44. Type locality: “Pannoniä inferiori et in confinibus Daciae regionibus (Kowarz)” ex titulo [Herculesbad, Romania].

Material examined. Kazakhstan: Alma-Ata, Pogan-ka River, on stones, 8–24.viii.1942, A.A. Stackelberg (3 ♂♂, 1 ♀, ZIN). **Tajikistan:** Tavil-dara, N slope of Darvazskiy Ridge, 7 and 9.x.1942, A.A. Stackelberg (2 ♀♀, MZLS; 13 ♂♂, 12 ♀♀, ZIN); Kalai-khumb, Darvaz, 21.viii.1943, A.A. Stackelberg (2 ♂♂, MZLS; 4 ♀♀,

ZIN); Stalinabad [=Dushanbe], foothills, 18.iv.1943, V.V. Goussakovskij (1 ♂, MZLS).

Remarks. Some pinned specimens (MZLS) were found partially destroyed by dermestids.

***Wiedemannia foliacea* Vaillant, 1960**

(Fig. 21)

Wiedemannia (Chamaedipsia) foliacea Vaillant, 1960b: 176. Type locality (by lectotype designation): Dushanbe, valley of Dushanbinka River, Tajikistan.

Wiedemannia (Chamaedipsia) foliacea: Chvála & Wagner, 1989: 325 (catalogue); Sinclair, 1995: 714.

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled [printed in Cyrillic] [Tajikistan]: “Wiedemannia/ (Chamaedipsia)/ foliacea/ VAILLANT/ ♂/ F. Vaillant dét. [yellow label]”; “Stalinabad [now Dushanbe]/ dol. [=dolina, valley]/ Dyushambinka [=Dushanbinka, a river]/ Stackelberg 13.v.[19]43”; “LECTOTYPUS/ Wiedemannia (Chamaedipsia)/ foliacea Vaillant/ des. Sinclair, Shamshev, Gattolliat 2020 [red label] (ZIN, INS_DIP_0000611). **PARALECTOTYPES: Tajikistan:** same data as lectotype, GBIFCH00606845 [incorrectly interpreted as “Vallée du ruisseau Goulbista”] (1 ♂, MZLS, slide); same data as lectotype, GBIFCH00654932 (1 ♂, MZLS, pinned); same data as lectotype (1 ♂, 2 ♀♀, ZIN, pinned); Stalinabad [=Dushanbe], foothills, 18.iv.1943, V.V. Goussakovskij (2 ♀♀, ZIN); Stalinabad [=Dushanbe], foothills, 27.vii.1945, V.V.

Goussakovskij, GBIFCH00606846 (1 ♂, MZLS, slide); Viskharvi on Pyandzh River, 21.x.1942, A.A. Stackelberg, GBIFCH00654931 (1 ♀, MZLS, pinned).

Additional material examined. Tajikistan: Stalinabad [=Dushanbe], Botanical garden, 13.v.1943, Stackelberg (1 ♀, ZIN).

Remarks. Vaillant (1960b) did not designate a type specimen for this species. Vaillant (1960b) listed a total of seven male and five female syntypes, of which five males and five females were found for this study. Additional material of this species has been identified in ZIN, which was not included in the original loan to Vaillant.

***Wiedemannia lota* Walker, 1851**

Wiedemannia lota Walker, 1851: 107. Type locality: Wicklow County, Ireland.

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

Atalanta astigmatica: Sinclair & Shamshev, 2019: 163 (lectotype designation, new synonym).

Material examined. Turkmenistan: Kara-kala [now Magtymguly], Syumy, viii.1931, P.A. Petristsheva (1 ♂, MZLS; Sinclair & Shamshev 2019, fig. 3), ix.1931 (2 ♂♂, ZIN (Sinclair & Shamshev 2019, figs 1, 2), 1 ♂, MZLS). **Tajikistan:** Stalinabad [=Dushanbe], valley of Gulbista River, 20.iv.1943, A.A. Stackelberg (1 ♂, ZIN; 1 ♂, on slide GBIFCH00606855, 1 ♀, MZLS); Stalinabad [=Du-



Figs 20–22. Specimens from Vaillant (1960b). **20.** *Wiedemannia bicolorata* Vaillant, two paralectotype slides. **21.** *Wiedemannia foliacea* Vaillant, two paralectotype slides. **22.** *Wiedemannia similis* Vaillant, lectotype slide.

shanbe], foothills, 18.iv.1943, V.V. Gussakovskij (1 ♀, MZLS); Rakhaty, Gissarskaya valley, 5.viii.1943 (1 ♀, ZIN); Tavit-dara, N slope of Darvazskiy Ridge, 7.x.1942, A.A. Stackelberg (2 ♀♀, ZIN).

Additional material examined. Tajikistan: Stalinabad [=Dushanbe], valley of river Dyushambinka [=Dushanbinka], 13.v.1943, Stackelberg (2 ♂♂, ZIN); Stalinabad [=Dushanbe], valley of river Gulbista, 20.iv.1943, Stackelberg (1 ♂, ZIN).

Remarks. The specimens from Turkmenistan were discovered to be the type specimens for *Atalanta astigmatica* Stackelberg (Sinclair & Shamshev 2019).

***Wiedemannia similis* Vaillant, 1960**
(Fig. 22)

Wiedemannia (Wiedemannia) similis Vaillant, 1960b: 178. Type locality (by lectotype designation): Viskharvi, River Pyandzh, Tajikistan.

Wiedemannia (Wiedemannia) similis: Chvála & Wagner, 1989: 324 (catalogue); Sinclair, 1995: 716.

Type material examined. LECTOTYPE (here designated in order to fix identity of the species), ♂ labelled (Fig. 22) [printed in Cyrillic] [Tajikistan]: “Viskharvi on r. [=reka, river]/ Pyandzh, Taj. [=Tajikistan]/ 21.x.[1]942, Stackelberg”; “LECTOTYPE/ *Wiedemannia/ (Wiedemannia) similis/* Vaillant, 1960/ des. Sinclair, Shamshev./ Gattolliat 2020 [red label]”; “*Wiedemannia (Wiedemannia) similis* VAILLANT ♂/ Défilé de Viskharvi, Massif/ de Darvaz, Tadzikistan./ 21.X.1942/ A.A. STACKELBERG coll./ F. VAILLANT”; “GBIFCH/ 00606847” (MZLS, slide). **PARALECTOTYPES: Tajikistan:** same data as lectotype (2 ♀♀, ZIN); Tavit-dara, N slope of Darvazskiy Ridge, 9.x.1942, A.A. Stackelberg (2 ♀♀, ZIN).

Remarks. Vaillant (1960b) did not designate a type specimen for this species. He listed one male and five female syntypes, of which one male and four females were found during this study.

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Autor(en)/Author(s): Sinclair Bradley J., Shamshev Igor V., Gattolliat Jean-Luc

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