

A new Erioptera from Switzerland/Valais (Diptera, Limoniidae)

Autor(en): **Stary, Jaroslav**

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A NEW *ERIOPTERA* FROM SWITZERLAND/VALAIS (DIPTERA, LIMONIIDAE)

JAROSLAV STARY

Department of Zoology, Faculty of Natural Sciences of the Palacký University, tr. Svobody 26, CZ-771 46 Olomouc, Czech Republic.

Summary

A new species, *Erioptera (Erioptera) aletschina* sp. n., is described from Switzerland/Valais. It is most similar, and closely related, to *E. (E.) beckeri* Kuntze, 1914, differing in body colouration and significant distinctions in the structure of the male terminalia.

INTRODUCTION

During a stay at Aletsch (canton Valais), on the occasion of the Second International Congress on Tipulomorpha, a peculiar new *Erioptera* was discovered. Description of the new species is given below.

The following abbreviations are used in this paper when referring to the depository of the specimens studied: JS - collection of J. Stary, Olomouc; MHNN - Musée d'histoire naturelle, Neuchâtel; ZMK - Zoologisk Museum, Kobenhavn.

DESCRIPTION

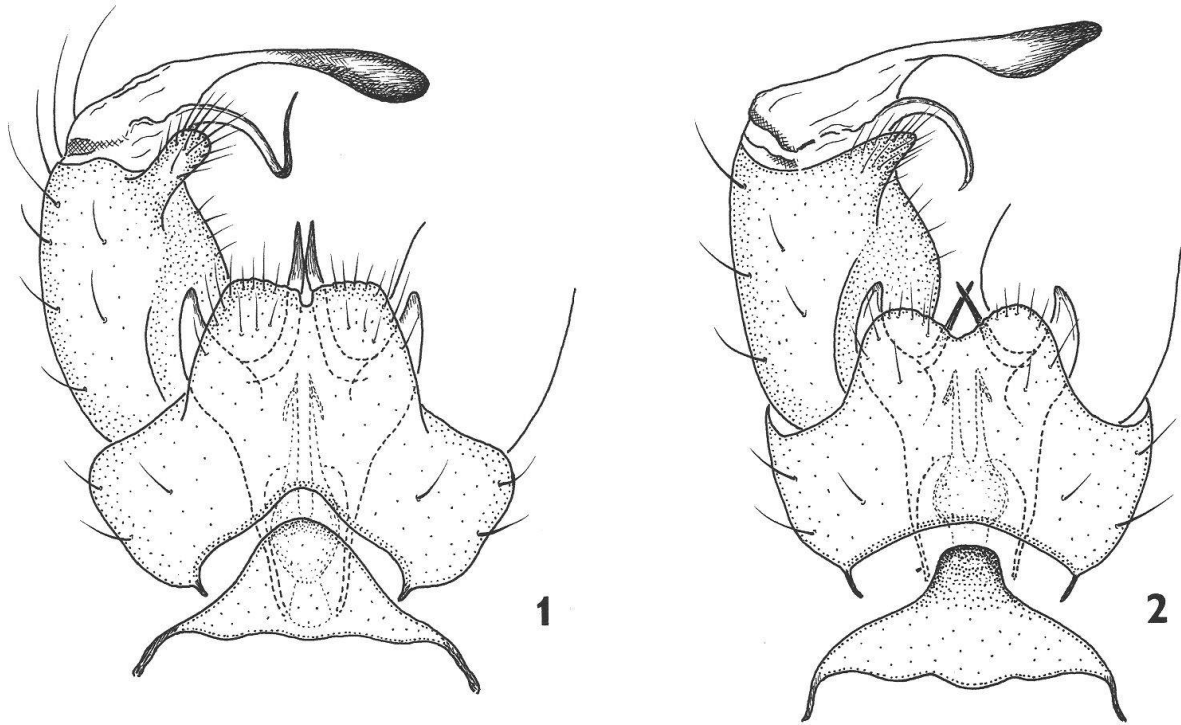
Erioptera (Erioptera) aletschina sp. n. (fig. 1)

Diagnosis. A large, robust species. Body very dark, including scutellum, densely grey pruinose, generally appearing velvet black. Male eye greatly enlarged. Halter conspicuously broad. Male terminalia with both gonostyli long, outer one spoon-shaped at apex, inner one recurved in

hook-like manner at distal third. Body length 6-8 mm, wing length 5.5-7.5 mm.

Male: Head greyish brown on vertex, paler just around eyes. Rostrum and palpus almost black. Eye greatly enlarged. Antenna short, extending just beyond fore coxa. Scape cylindrical, almost black. Pedicel conical, with narrower base, paler than scape, greyish brown. Both basal segments subequal in length, rather long and broad, compared to short, slender flagellomeres concolorous with pedicel. Flagellomeres oval to long-oval, gradually decreasing in width towards apex of antenna, with dense, short, whitish pubescence, so that flagellum appears paler than it really is, and with longest verticils about twice as respective segments.

Thorax generally black, densely grey pruinose. Prescutum slightly suffused with brownish medially. Scutum restrictedly yellowed near base of wing. Scutellum, postscutellum and pleuron black, densely



Figures 1-2:

Male terminalia, general view, dorsal.

1 - *Erioptera (Erioptera) aletschina* sp. n. (holotype);

2 - *Erioptera (Erioptera) beckeri* Kuntze, 1914 (Denmark: Silkeborg).

grey pruinose, the latter with conspicuous tufts of long, yellow hairs on some sclerites (especially mesothoracic epimeron and metathoracic episternum), usual in position, but not in length and density, for the tribe Eriopterini. Wing broad, strongly tinged with blackish, provided with very long macrotrichia on veins and at hind wing margin. Venation usual for the subgenus, without any distinct peculiarities. Halter unusually stout, conspicuously broad, although not especially long, yellow on stem, somewhat infuscated on knob apically. Legs comparatively stout. Coxae yellowish brown, trochanters and bases of femora yellow. Otherwise, legs are almost black, with dense pubescence somewhat paler.

Abdomen slightly paler than thorax, more brownish, with very long, dense,

yellow hairs, especially on tergites laterally. Male terminalia (fig. 1) comparatively large and stout. Tergite 8 generally triangular in outline, produced and broadly rounded medially at posterior margin, but without distinct projection or bump. Tergite 9 conspicuously produced at posterior margin to form broad plate, roughly trapezoid in outline, with small median notch. Gonocoxite stout, with comparatively slender, finger-like, hairy lobe on inner dorsal side apically. Outer gonostylus long, slightly curved, broad at base and strongly narrowed at mid-length, and flattened, spoon-shaped apically, with "spoon" darkly pigmented and slightly convex on dorsal side. Inner gonostylus very long and slender, recurved in hook-like manner at distal third of its length, very slender apically, with acute blackened tip directed posteriorly. Aedeagal complex with para-

meres long, pointed and blackened at tip. Aedeagus deeply bifid, the two arms free as far as vesica, angularly recurved downwards distally.

Female: In general appearance resembling male except that eye is "normal" in size, not as large as in male. Female ovipositor bronze in colour, with cercus slender, comparatively strongly upturned, subacute at tip.

Type material. Holotype ♂: Switzerland, Valais, Aletschwald, Teiffenwald (1800 m), Swiss coordinates 644.2/137.2, 4.VII.1996, (J. Stary leg.) (MHNN). Paratypes (2 ♂, 4 ♀): same locality as for holotype, 4.VII.1996, 1 ♂, 4 ♀, 5.VII.1996, 1 ♂ (J. Stary leg.) (JS, MHNN).

Discussion. The new species is distinctive by its large size, robust appearance and velvet black body colouration (most pronounced in fresh material). Other external peculiarities include the greatly enlarged eyes in the male, unusually broad halteres, and long and dense setosity of the body. *E. aletschina* sp. n. is most similar, and closely related, to *E. beckeri* Kuntze, 1914. With the latter species, it shares most of the above-mentioned external characters, differing in darker, velvet black body colouration, including the scutellum. In *E. beckeri*, the body colouration is rather brown to dark brown [described as dark ochreous ("dunkel lehmfarbig") by KUNTZE, 1914] and the scutellum is yellowed at least posteriorly. Although the male terminalia of the new species are similar in general structure to those of *E. beckeri*, they are highly distinctive in details, as illustrated (figs. 1 and 2), especially in that the apical lobe of the gonocoxite is comparatively slender, finger-like [generally triangular in outline in *E. beckeri*, very broad at base and strongly narrowed distally], the outer gonostylus is symmetrical, spoon-shaped apically [differently shaped in *E. beckeri*, asymmetrical,

rather lancet-shaped apically], and the inner gonostylus is long, recurved in a hook-like manner at distal third, with the tip directed posteriorly [shorter in *E. beckeri*, curved inwardly, with the tip directed caudally and provided with a short and broad, pale bristle]. Parameres are distinctly longer in the new species than in *E. beckeri*, general structure of the aedeagal complex is, however, similar to that in *E. beckeri* and other species around *E. sordida* Zetterstedt, 1838.

Habitat: A shaded, boggy site with springs, at the foot of a small cliff, in a *Picea* forest. Deep, dark organic soil, with *Adenostyles*.

Derivation of name: The name of the new species, derived from the name of the type locality, is deemed to be and to be treated as a latinized adjective in nominative singular (with termination appropriate to feminine gender of the combined genus), in accordance with relevant provisions of the Article 11 of the ICZN (1985).

Note: The closely related *Erioptera beckeri* Kuntze, 1914, the male terminalia of which (fig. 2) have apparently never been illustrated, is widely distributed in Palearctic, but rarely collected in Europe. It was described from Sweden on the basis of a single female (KUNTZE, 1914), with additional records from the country by TJEDER (1955), and furthermore recorded from Denmark (NIELSEN, 1925), Finland (HACKMAN, 1980), northwestern Russia ("Leningrad region") (STACKELBERG, 1951), and from several localities in Siberia and the Russian Far East (SAVCHENKO, 1977, 1983, 1989; SAVCHENKO, OOSTERBROEK & STARY, 1992). The following material of this species was examined by me:

Denmark: Silkeborg, 23.V.1907, 1 ♂ (P. Nielsen leg.) (ZMK). Russia: Buryatskaya ASSR, N.

Angarsk marsh, 12.VII.1969, 3 ♂ (Mirzaeva leg.); Primorskiy kray, Khasanskiy rayon, near the Golubinogo cliff, 3.VII.1976, 2 ♂ (N. Klestov leg.) (JS).

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REFERENCES

- HACKMAN, W. 1980. A check list of the Finnish Diptera. I. Nematocera and Brachycera (s.str.). *Notulae Ent.*, 60: 17-48.
- ICZN, 1985. International Code of Zoological Nomenclature. Third Edition. *Int. Trust for Zool. Nomencl. in assoc. with British Museum (Nat. Hist.)*, London.
- KUNTZE, A. 1914. Bestimmungstabellen der paläarktischen Eriopterinen (Diptera Nematocera, Polyneura). *Annl. n. k. naturhist. Hofmus.*, 28: 361-388.
- NIELSEN, P. 1925. Stankelben. *Danmarks Fauna, G.E.C. Gads Forlag, Kobenhavn*.
- SAVCHENKO, E. N. 1977. K faune gidro- i gelobiontnykh komarov-limoniid (Diptera, Limoniidae) zapovednika "Kedrovaya pad" i nekotorykh drugikh payonov Yuzhnogo Primorya (On the fauna of hydro- and gelobiont Limoniidae (Diptera) in the nature reserve "Kedrovaya pad" and some other districts of south Primorye). *Trudy biologo-pochvennogo instituta*, 45: 88-108, Vladivostok (in Russian).
- SAVCHENKO, E. N. 1983. Komary-limoniidy Yuzhnogo Primorya [Limoniidae of south Primorye]. *Naukova dumka, Kiev* (in Russian).
- SAVCHENKO, E. N. 1989. Komary-limoniidy fauny SSSR [Limoniidae fauna of the USSR]. *Naukova dumka, Kiev* (in Russian).
- SAVCHENKO, E. N., OOSTERBROEK, P. & STARY, J. 1992. Family Limoniidae. In Soos, A., Papp, L. & Oosterbroek, P. (eds.): *Catalogue of Palaearctic Diptera*, Vol. 1. 520 pp. (p. 183-369). *Hungarian Natural History Museum, Budapest*.
- STACKELBERG, A. A. 1951. Materialy po faune dvukrylykh Leningradskoy oblasti [Materials on the Diptera fauna of the Leningrad region]. I. Nematocera polyneura (Diptera). *Trudy Zool. inst. AN SSSR*, 9: 703-742. *Leningrad* (in Russian).
- TJEDER, B. 1955. Catalogus Insectorum Sueciae. XIV. Diptera: Fam. Tipulidae. *Opusc. ent.*, 20: 229-247.