

A new *Wesmaelius* from Central Asia (Neuroptera, Hemerobiidae)

By BO TJEDER

Through the courtesy of Professor Lars Brundin, Stockholm, I have had the opportunity to study the specimen described below as a new species.

This new species belongs to the genus commonly dealt with as *Boriomyia*, described by Banks in 1905 with *Hemerobius disjunctus* Banks, 1897, as type species by original designation. After an application by D. E. Kimmins for the suppression of *Boriomyia* Banks, 1904, the International Commission on Zoological Nomenclature has, however, with 14 votes against 10 refused the application and has placed *Boriomyia* Banks, 1904, type species by designation by Killington, 1937, *Hemerobius fidelis* Banks, 1897, on the Official List of Generic Names in Zoology (Opinion 752. Bull. zool. Nomencl. 22, p. 224, 1965). *Boriomyia* Banks, 1904, was used in a local list for two species, *Hemerobius fidelis* Banks, 1897, and *H. speciosus* Banks, 1904, which not are congeneric with *disjunctus* and subsequently by Banks were arranged in *Allotomyia* Banks, 1930. The local list happened to be printed before the paper containing the description and type designation, though the latter paper was sent off for publication before the list. *Boriomyia* Banks (syn.: *Allotomyia* Banks) has thus to be used for the two North American species *fidelis* and *speciosus*, and we have accordingly to use another genus name for the many species which belong to *Boriomyia* Banks, 1905. *Wesmaelius* Krüger, 1922, seems to be the oldest available name (with *Kimminsia* Killington, 1937, as a synonym). Killington and some later authors have considered *Wesmaelius* as a distinct genus, distinguished from *Kimminsia* mainly by usually having 4 radial sectors whereas in *Kimminsia* there are usually but three. The species of both groups have, however, the same characteristic pattern of the genital structures of both sexes, unlike that of all other Hemerobiids, and the number of radial sectors is variable. I am not able to find differences of such an importance that they justify a division of the group into two genera.

Wesmaelius sufuensis n. sp.

(Figs 1—12)

Locus typicus: Kaschgar in Sinkiang. — Type: a male in the collections of the Riksmuseum, Stockholm.

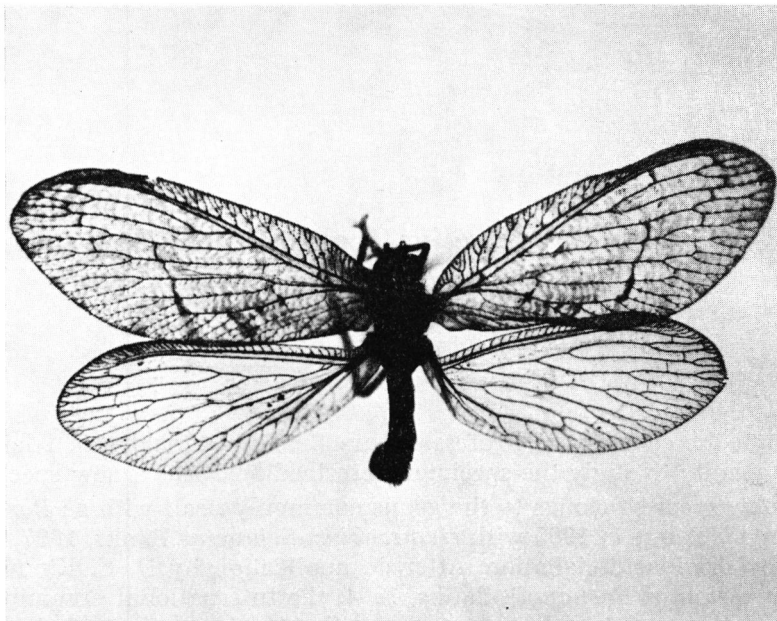


Fig. 1. *Wesmaelius sufuensis* n. sp. (holotype ♂; forewing 7 mm).

Description

Holotype ♂ (pinned).

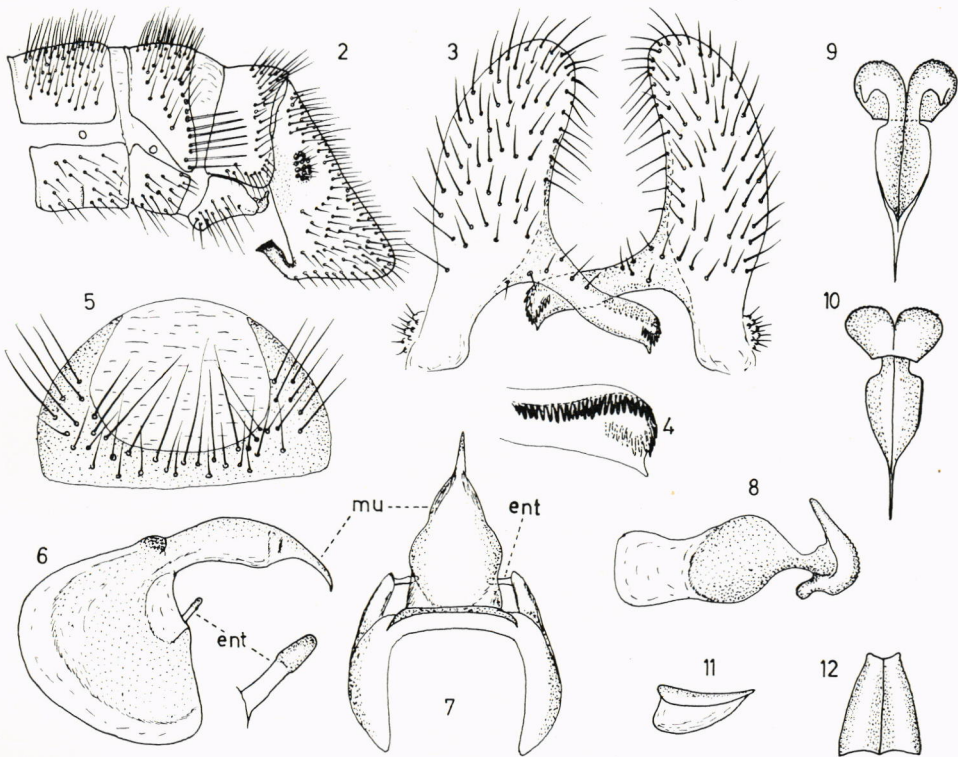
Size: length of body about 5.5 mm, of forewing 7 mm, of hindwing 6 mm.

Frons, clypeus and labrum shining brown. Genae and vertex yellow. Vertex with rather long and dense, pale hairiness. Mouthparts yellowish brown. Scape and pedicel yellow, with yellow setae. Flagellum of both antennae lost.

Pronotum yellow with a pair of lateral blackish brown stripes. Its lateral lobes yellow. Meso- and meta-notum also yellow with lateral blackish brown stripes. Yellowish spots are present in the stripes close to each wing base. Hairiness of thorax yellow. Legs yellow but fore femur with a narrow, brown longitudinal dorsal stripe, fore tibiae with a pale brown median ring and pale brown apices, and 5th segment of all tarsi dark brown; hairiness yellow.

Forewing elongately oval. Membrane pale with greyish sagittate markings and pale fuscous shadings over the inner gradates and in the anal area as shown in fig. 1. Veins pale with brown interruptions. Three Rs-branches. Hindwing hyaline with pale venation.

Abdomen yellowish brown with yellow, rather dense and long hairiness, especially dense on tergites 7 and 8 and there forming dense tufts of dorsally directed hairs as shown in fig. 2. Tergite 8 on each side with a number of stiff and very long hairs which are directed backwards as shown in the same figure. Tergite 9 broad. Sternite 9 modified, being ventrally sclerotized only along its very base. Its ventral (central) and distal part is covered by a thin and unpigmented membrane as indicated in fig. 5. The sternite carries some



Figs. 2—12. *Wesmaelius sufuensis* n. sp. (holotype ♂). — 2. Apex of abdomen, lateral. — 3. Ectoprocts, ventral. — 4. Apex of prong of left ectoproct, dorsal. — 5. Sternite 9, ventral. — 6. Gonarcus, lateral, and entoprocessus (more enlarged). — 7. Gonarcus, dorsal. — 8. Parameres, lateral. — 9. Ditto, dorsal. — 10. Ditto, ventral. — 11. Hypandrium internum, lateral. — 12. Ditto, dorsal. — Abbreviations: ent=entoprocessus; mu=mediuncus.

very long hairs. Ectoprocts large, of shape as shown in fig. 1. Their distal prongs are rather long and are directed forwards-inwards (fig. 3) but are visible also in lateral view. These prongs end in an acute tooth. The row of lamellae, characteristic of this genus, commences on the dorsal surface and runs around the apex of the prong as illustrated in fig. 4. Callus cerci elongate, with very long, acute mediuncus (*mu*) without ventral tooth. The mediuncus is proximally broad in dorsal view. Its narrow extreme apex is a little downwards bent. Entoprocessus (*ent*) tubular, extremely small and weak, almost membranous, pale with the tip portion lightly pigmented, pale yellowish brown. The entoprocessus proceed from weak, membranous areas and are directed inwards and a little upwards. Parameres (figs. 8—10) with very broad apical part, curved downwards and forming a kind of ventral plate, and with upwards-directed rather acute apices. Their hind-margin appears slightly serrate, in lateral as well as dorsal or ventral view. Apo-

physis proxima very broad in lateral view (fig. 8). Superprocessus lacking. Hypandrium internum of shape as shown in figs. 11—12.

Female unknown.

Geographical distribution

Sinkiang: Kaschgar, holotype ♂, leg. G. R. Raquette, in coll. Riksmuseum, Stockholm. Date of collection not noted on the label. — Fil. Dr. h. c. G. R. Raquette (1871—1945) was a philologist. He worked as a missionary in Eastern Turkestan in the years 1896—1921.

Ecological distribution

Kaschgar (Su-Fu) is a town and oasis in Sinkiang (Eastern Turkestan) at the extreme west end of the Tarim basin where the mighty Tien shan and the Mustag Ata range of the Pamir meet. Altitude about 1,300 m. Climate dry and warm. Average rainfall only a little more than 3 inches a year. Average temperature: January about +7°C, July about +36°C. The region is fertile, irrigated by river and well water; ground loess soil. The nature of the oasis is mainly destroyed by settlement and other activities of man. It produces now crops of corn (wheat, maize, etc.) and fruits (peaches, grapes, etc.) and is a center for cotton growing in Sinkiang.

Note

Wesmaelius sufuensis n. sp. differs in many characteristics of its ♂ genitalia from all other species of the genus. The peculiar shape of the entoprocessus has no similarity to other species, in which the entoprocessus are formed as strong, more or less acute processes from the sclerotized lateral parts of the gonarcus. The shape of the parameres seems also unique. The hairiness of the tergites 7 and 8 is rather similar to that of *W. malladai* (Nav.) and *W. tjederi* (Kimmins) which also have dense dorsal tufts and some spine-like hairs along the hind-margin of tergite 8.