

Mycetophila strigatoides (Landrock):
an Overlooked British Fungus Gnat
(Diptera: Mycetophilidae)

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During a visit to the Cambridge University Museum, I found that the two males referred to *Mycetophila bialorussica* Dziedzicki in the collections there, were not conspecific and one of them was subsequently found to be *M. strigatoides* (Landrock), a widespread Holarctic species according to the synonymy established by Plassmann (1970b). Although apparently less frequent in Europe than in North America, its occurrence in Britain was expected.

M. strigatoides resembles *bialorussica* in many respects, including the fore tarsi thickened in both sexes; apart from genital characters (notably the bifid distal portion of the dististyle), *strigatoides* has the male tarsi less strongly enlarged and the wing markings smaller; the preapical band is less intense and is not always touching the tip of vein R1.

Mycetophila strigatoides (Landrock)

Mycetophila strygata (sic) Zetterstedt: Dziedzicki, 1881, Tab. VII, 9-12.

Fungivora strigatoides Landrock, 1927, 177 nom. n. for *strygata* Dziedzicki, 1884 nec Staeger, 1840, 242; Plassmann, 1970a, 391; 1971, 78.

Fungivora venusta Laffoon, 1956, 290; synonymy, Plassmann, 1970b, 399.

Mycetophila strigatoides (Landrock); Plassmann, 1973, 17.

Male. Wing length 3.2 mm. Head brown; scape, pedicel and base of first flagellar segment yellow, rest of antenna grey; palpi brownish yellow.

Mesoscutum mainly shining dark brown, clothed with pale hair; anterior margin, broad humeral margins and small postalar patches yellow. Prothorax brownish yellow; rest of pleura, metathorax and scutellum brown. Three propleurals, four bristles on mesepimeron, two pairs of scutellars. Halteres yellow.

Legs entirely yellow except faint darkening at extreme tip of hind femur. Anterior setulae of hind tibia dark. Hind coxal setae short. Mid tibia with 3 a, 1 a-d, 5 d (last more p-d), 2 p, 2 v. Hind tibia with 6 a, 5 d (1 short above), 3 short p near tip. Segments 2-4 of fore tarsi a little thickened below.

Wings yellowish with yellow veins. M before r-m with 1 setule below near tip; r-m about twice m-stalk. R5 a little down curved towards tip. A small dark brown central spot from R to base of m-fork; a lighter preapical shade filling end of cell R1 but stopping a little short of vein R1, contracted basad in cell R5, faintly extended across median fork to just reach Cu1 (according to Laffoon's description of *venusta*, preapical band may begin at, just before or just beyond R1; M before r-m may have 1-2 setulae below).

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Abdomen mostly dark brown, narrowly paler at bases and apices of tergites. Hypopygium brownish yellow, figs. 1a-b.

Material examined: STIRLING: Auchenbowie, 7-11.ix.1904, 1 ♂ (F. Jenkinson, Cambridge Univ. Mus.).

The above description agrees substantially with Laffoon's (*op. cit.*) description of *venusta*. He stated that Nearctic specimens had a basally constricted process on the posterior margin of the dististyle not apparent in Dziedzicki's figures of "*strygata*" or in Bukowski's (1934) figures of his *pseudoquadra*, which is closely similar. Plassmann considered that the discrepancy resulted from the aspect figured and based the synonymy on specimens collected by him in Germany.

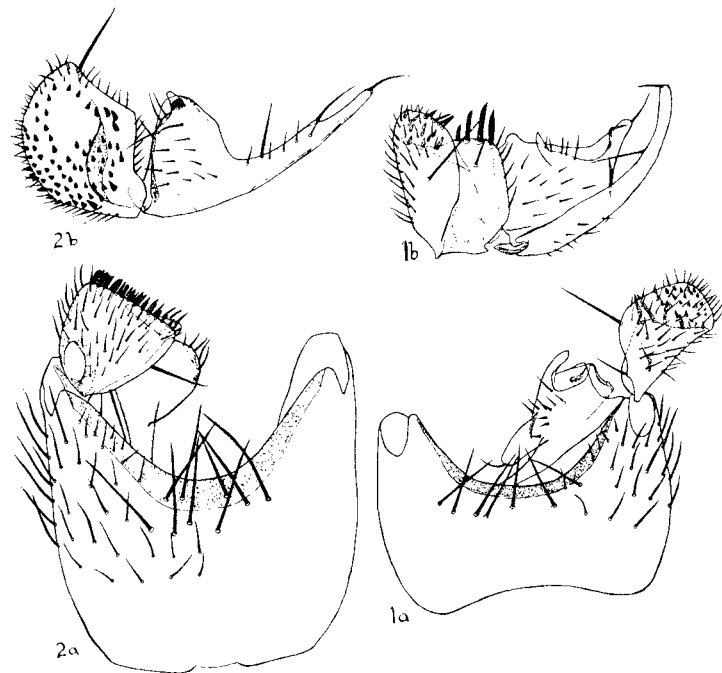


Fig. 1 a-b. *Mycetophila strigatoides* (Landrock), male hypopygium; a, ventral view; b, dorso-internal view of stylomeres.

Fig. 2 a-b. *M. bialorussica* Dziedzicki, male hypopygium; a, ventral view; b, internal view of stylomeres.

A further closely similar form was described in both sexes by Matile (1967) from the Pyrenees as *pseudoquadroides*, which he compared with *bialorussica*, *quadra* Lundström (1909, 61, figs. 143-5) and *pseudoquadra* Bukowski, without mentioning *strigatoides*. The constricted process of the dististyle is omitted from his figure but the genitalia do not otherwise differ appreciably from *strigatoides* and I consider it likely that both *pseudoquadra* and *pseudoquadroides* will prove to be synonymous with *strigatoides*. *M. quadra* has a few spines and many spinules on ventral and dorsal lobes of the basistyle respectively, i.e. in reverse positions to *strigatoides*, and the dististyle is also shorter and not bifid.

Mycetophila bialorussica Dziedzicki

This too is scarce in Britain and records are fully quoted by Chandler (1977) where the ovipositor is figured. I have also seen 1 ♂, BANFFSHIRE: Logie, 27.ix.1913 (F. Jenkinson, Cambridge Univ. Mus.). The male genitalia (figs. 2a-b) are figured here for comparison with *strigatoides*; external differences are as follows:—

Legs orange yellow with apical quarter of hind femora and tip of mid tibia darkened; fore tarsi with segments 2-4 more strongly enlarged than in *strigatoides*, especially 2 near tip and 3; mid tibia with 3 v; hind tibia with 7 a, 7 d (first weak), 4 short p near tip.

Wing markings similar but larger and darker, both of same intensity; preapical band touching extreme tip of R1, reaching Cu1 but interrupted in m-fork, 0-2 setulae below tip of M before r-m.

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References

- Bukowski, W. 1934. Neue und abweichende Formen von Pilzmücken (Diptera, Fungivoridae) aus der Krim. *Konowia*, **13**: 183-192.
- Chandler, P. J. 1977. Studies of some fungus gnats (Diptera, Mycetophilidae) including nine additions to the British list. *Syst. Ent.*, **2**: 67-93.
- Dziedzicki, H. 1884. Przyczynek do fauny owadów dwuskrzydłych Gatunki rodzajów: *Mycothera*, *Mycetophila*, *Staegeria*. *Pamiętnika Fizyograficznego*, **4**: 298-324.
- Laffoon, J. 1957. A revision of the Nearctic species of *Fungivora* (Diptera, Mycetophilidae). *Iowa State Coll. J. Sci.*, **31**: 141-340.
- Landrock, K. 1927. Fungivoridae (Mycetophilidae) in Lindner, E. *Die Fliegen der Palaearktischen Region*, **8**: 1-195. Stuttgart.
- Lundström, C. 1909. Beiträge zur Kenntnis der Dipteren Finlands. IV. Suppl. *Acta Soc. Fauna Fl. Fenn.*, **32**: 1-67.
- Matile, L. 1967. Notes sur les Mycetophilidae de la région pyrénéenne et description de quatre espèces nouvelles (Diptera, Nematocera). *Bull. Soc. ent. France*, **77**: 121-126, 208-217.
- Plassmann, E. 1970a. Die Fungivoriden Sammlung des Senckenberg-Museums Frankfurt-am-Main. *Senckenbergiana biol.*, **51**: 387-391.
- Plassmann, E. 1970b. Zur Taxonomie der Fungivoridae (Diptera). *Senckenbergiana biol.*, **51**: 393-400.
- Plassmann, E. 1971. Über die Fungivoriden-Fauna (Diptera) des Naturparkes Hoher Vogelsberg. *Oberhess. Naturwiss. Zeitschr.*, **38**: 53-87.
- Plassmann, E. 1973. Pilzmücken in der Lichtfalle (Diptera, Mycetophilidae). *Mitt. Dtsche Ent. Ges.*, **32**: 15-17.
- Staeger, C. 1840. Systematisk Fortegnelse over de i Danmark hidtil fundne Diptera. *Natur. Tidsskr.*, **3**: 228-288.