

NEW PALAEARCTIC FUNGUS-GNATS (DIPTERA, FUNGIVORIDAE)

By A. A. STACKELBERG.

***Hadroneura kamtshatica* sp. n.**

Hypopygium moderately short and broad, with well-developed cerci, distal margin of which ornamented with a row of dense bristles; style with a large basal tooth-like process.

Male. Head black, grey pollinose, with yellow hairs. Palpi and proboscis blackish-brown. Antennae moderately long, black; second basal joint brownish-yellow. Thorax black; mesonotum greyish pollinose, not shining, with 4 moderately broad black longitudinal stripes. Mesonotal bristles yellow. Pleura and postscutellum greyish pollinose, not shining; pleurotergite with dense, but short yellowish hairs. Coxae and legs dark yellow; trochanters brown; tarsi blackish-brown. Tibial spurs yellow. Front tibiae about as long as four basal joints of front tarsi taken together. Claws normal, with a small tooth-like process at base; empodium distinctly developed. Wings brownish tinged; wing veins of the front half of wing rather thick. Wing-venation as in *Hadroneura palmeni* Lundstr., but anal vein slightly longer. Abdomen black, moderately shining, with yellowish hairs. Hypopygium (figs. 1, 2) broad; coxite large and robust; style moderately long, with a tooth-like process at base; cerci large with a comb-like row of long and dense flattened bristles on distal margin. Wing about 4.5 mm.

Distribution.—Kamchatka, Kamchatka river near Kljutshevsk, 8.vi.1909, 1 ♂—type (*Sapozhnikov*). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.

***Boletina kowarzi* sp. n.**

Species of medium size. Pleurotergite hairy. Mesonotal bristles dark brown. Similar to *Boletina dubia* Mg. and *Boletina villosa* (Landr.) Edw., but differs in hypopygium.

Male. Head black, slightly shining, with dark brown hairs. Palpi blackish-brown. Antennae moderately short, black. Thorax black. Mesonotum black, polished, without longitudinal stripes. Acrostichal and dorsocentral bristles dark brown. Pleura and postscutellum polished black, slightly grey pollinose. Coxae and legs dark yellow. Tarsi dark (brown to black). Tibial spurs dark brown. Mid- and hind-tarsal claws of ♂ equal, with a small basal tooth (front tarsi of type absent). Wings slightly brownish tinged; costal vein reaches to about $\frac{1}{4}$ of the distance from r_5 to m_1 ; sc ending above base of r_5 ; sc_2 absent; stem of m -fork about as long as rm ; basis of cubital fork at about level of m -fork; an terminating at about level of basal third of cu -fork. Halteres yellowish. Abdomen black, polished. Hypopygium (figs. 3, 4) moderately large and long, black; style forked; medial arm of style shorter than the lateral one, without terminal appendage. Wing about 4 mm.

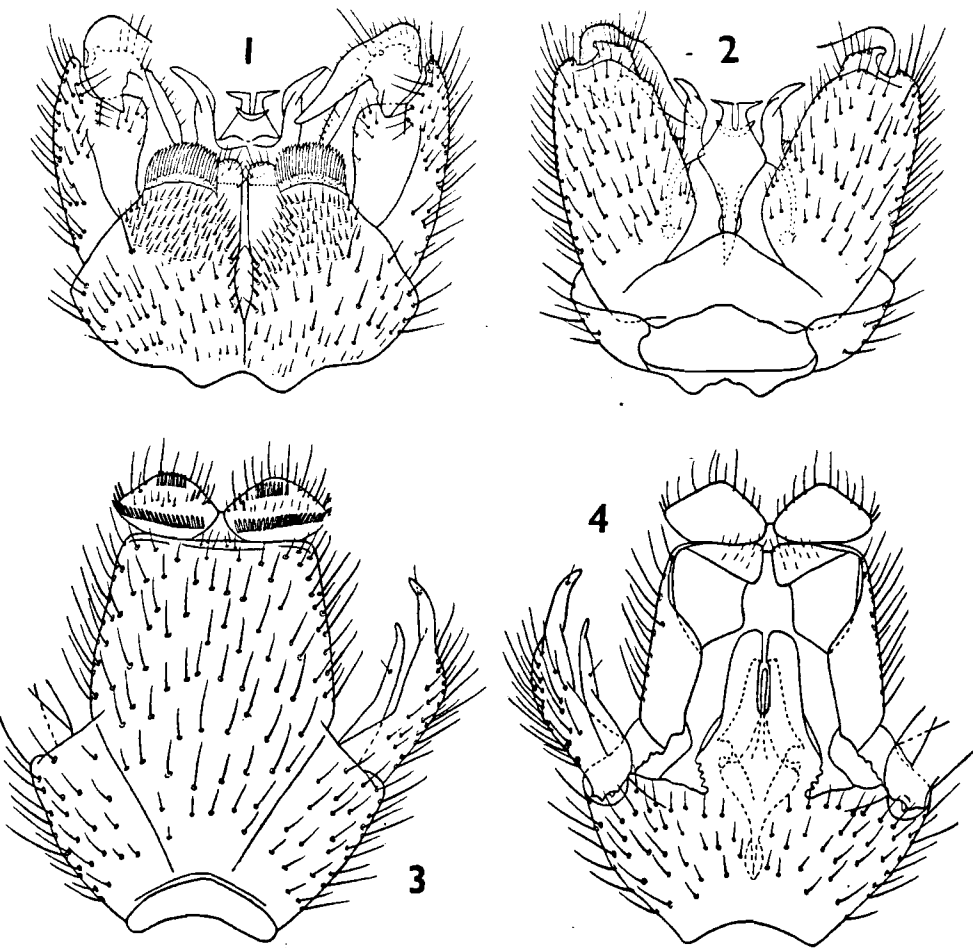
Distribution.—Germany. Described from 1 ♂ (type) from Bad Liebenstein, Thuringia, 28.vi.1877 (*Fr. Kowarz*). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.

***Boletina verticillata* (Lackschewitz *in litt.*) sp. n.**

Small black species with very long cerci and broad knife-like style. Pleurotergite bare.

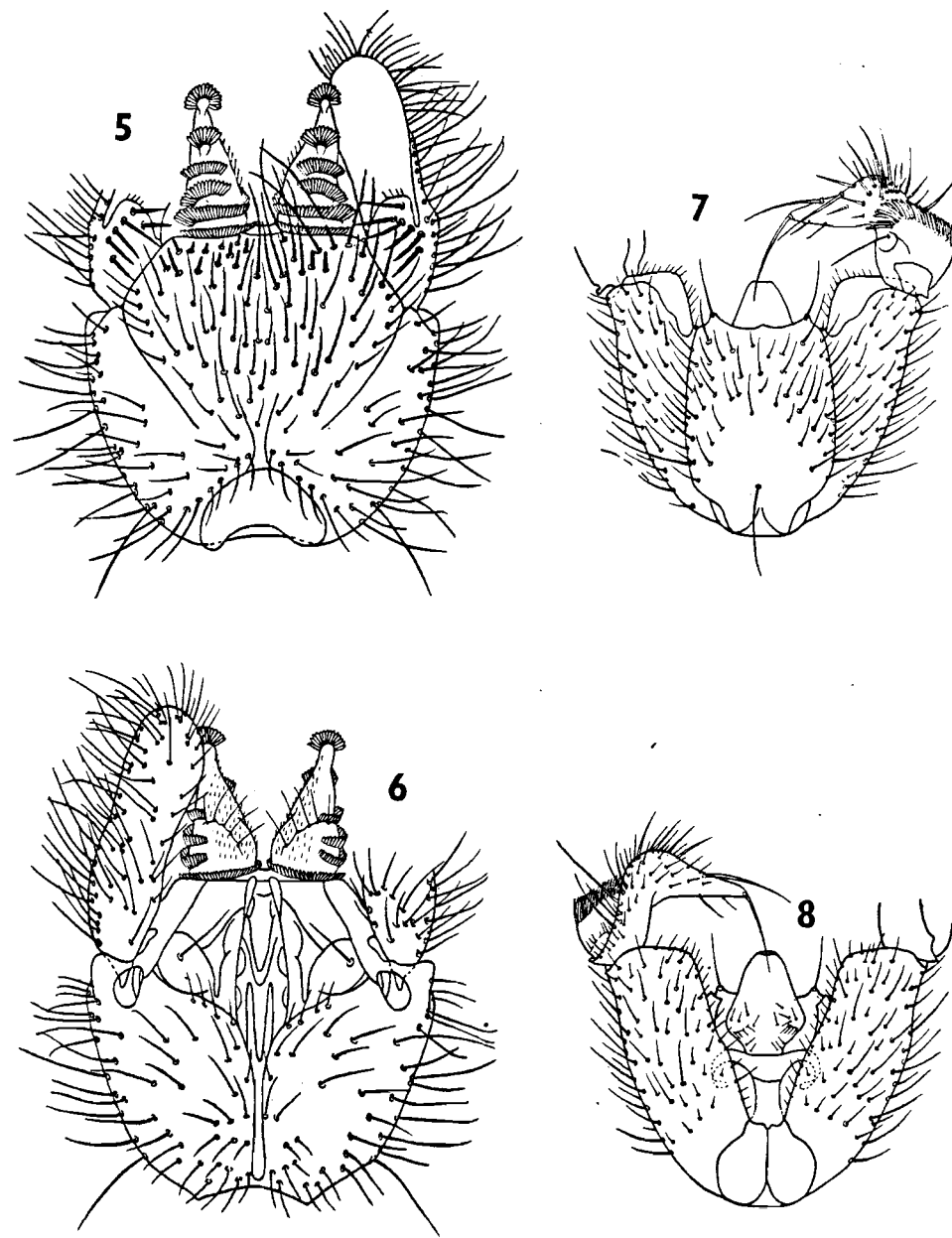
Male. Head black, slightly greyish pollinose. Palpi yellow. Antennae long, black; first flagellar joint yellow at base. Thorax black; mesonotum polished black; sides of
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mesonotum and humeral tubercle light grey pollinose. Pleura and postscutellum greyish pollinose; pleurotergite bare. Mesonotal bristles light yellow. Coxae and legs yellow; basal half of hind coxae dark, blackish-grey. Tibial spurs yellow. Tarsi blackish-brown. The first joint of front tarsi slightly shorter than tibiae; the fourth joint of front tarsi $1\frac{1}{2}$ times as long as the fifth. Tarsal claws of the male small, not broadened, symmetrical,



FIGS. 1-4.—1, *Hadroneura kamshatica* sp. n. ♂. Hypopygium from above; 2, *Hadroneura kamshatica* sp. n. ♂. Hypopygium from below; 3, *Boletina kowarzi* sp. n. ♂. Hypopygium from above; 4, *Boletina kowarzi* sp. n. ♂. Hypopygium from below.

with a small basal tooth. Wings clear, slightly yellowish at base. Costal vein reaches to about $\frac{1}{2}$ of the distance from r_5 to m ; sc ending above base of r_5 ; sc_2 absent; stem of m -fork about as long as rm ; basis of cubital fork slightly behind middle of m -fork-stem; cubital fork-stem with short bristles; an terminating at about level of basal third of cubital fork. Halteres whitish. Abdomen black, polished. Hypopygium (figs. 5, 6)



FIGS. 5-8.—5, *Boletina verticillata* sp. n. ♂. Hypopygium from above; 6, *Boletina verticillata* sp. n. ♂. Hypopygium from below; 7, *Sciophila fridolini* sp. n. ♂. Hypopygium from above; 8, *Sciophila fridolini* sp. n. ♂. Hypopygium from below.

large and long; cerci very long, about 3 times as long as broad at base, with about 5 transverse rows of flattened bristles; style broad, knife-like, long, with truncate tip, on the lateral margin with moderately long bristles. Wing about 3 mm.

Distribution.—N.W. Siberia, between Small Ural (Malyj Ural) and Lake Vartsha-ty, distr. Obdorsk, 28.viii.1925, 1 ♂—type (V. Y. Fridolin). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.

Sciophila fridolini sp. n.

Similar to *Sciophila plurisetosa* Edw., but differs in hypopygium.

Male. Head black. Palpi blackish. Antennae black, with yellowish-brown basal joints; flagellar joints as long as broad or slightly longer than broad. Thorax black; mesonotum polished black; pleura sometimes yellowish-brown. Coxae and legs dark

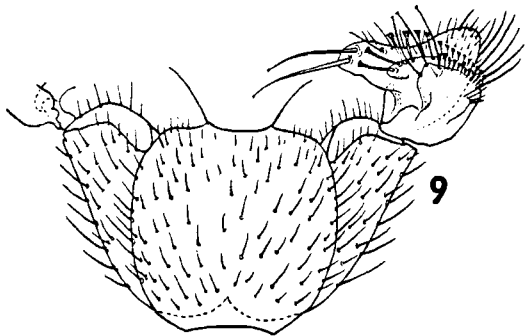


FIG. 9.—*Sciophila vakulenkoï* sp. n. ♂. Hypopygium from above.

yellow; tarsi brown. Wings clear, slightly yellowish at base; wing membrane covered with micro- and macrotrichia; cu_1 normal, not interrupted. Abdomen black. Hypopygium (figs. 7, 8) below with a very large triangular incision, reaching to about basal fourth of hypopygium; ventral lamella of style long, triangular, with acute medial end, bristly haired; 9th tergite with slightly concave distal margin. Wing about 3 mm.

Distribution.—Kola Peninsula, Chibinā, 1 ♂—type (V. Y. Fridolin). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.

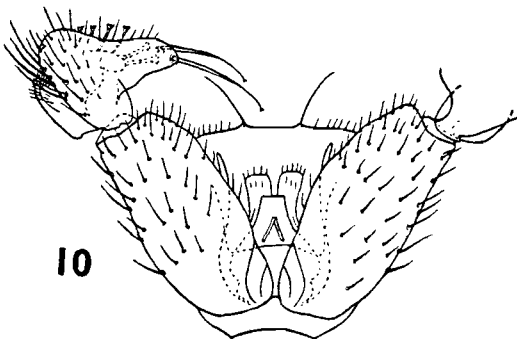


FIG. 10.—*Sciophila vakulenkoï* sp. n. ♂. Hypopygium from below.

Sciophila vakulenkoï sp. n.

Similar to *Sciophila fuliginosa* (Holmgren) Lundstrom, but differs by longer medial fork-stem, which is as long as *rm* or even longer, by yellowish wing-veins and differences in the hypopygium.

Male. Head black. Palpi and antennae uniformly black. Thorax black, slightly polished. Abdomen black. Thorax and abdomen covered with yellow hairs. Coxae black, slightly greyish pollinose. Femora brown; tibiae yellowish-brown; tarsi blackish-brown. First joint of front tarsi about as long as front tibia. Wings slightly brownish tinged, with micro- and macrotrichia. Wing-veins, especially costal vein, yellowish; *m*-fork-stem as long as *rm* or slightly longer. Hypopygium (figs. 9, 10) broad and short; style with moderately short ventral lobe, but without lateral tuft; 9th tergite quadratic, with nearly straight distal margin. Wing about 4 mm.

Distribution.—Novaja Zemlja, Southern Isle, 1925 (*Vakulenko*). Type in the Collection of the Zoological Institute, Academy of Sciences, Leningrad.