

Beitr. Ent.	Berlin	ISSN 0005-805X
48 (1998) 1	S. 201-217	31.03.1998

The Palaearctic species of the genus *Sylvicola* HARRIS, 1776 (Diptera, Anisopodidae)¹

With 33 figures

NINA P. KRIVOSHEINA & FRANK MENZEL

Summary

The descriptions of the 9 previously known Palaearctic species of *Sylvicola* HARRIS are revised, 2 new species close to *S. fuscatus* (FABRICIUS) [*S. subfuscatus* spec. nov. and *S. stackelbergi* spec. nov.] are described. A key to all Palaearctic species is given.

Zusammenfassung

Die Beschreibungen für 9 bisher bekannte paläarktische Arten von *Sylvicola* HARRIS werden präzisiert. Auf der Basis von Exemplaren, die in der Vergangenheit als *S. fuscatus* (FABRICIUS) bestimmt wurden, werden mit *S. subfuscatus* spec. nov. und *S. stackelbergi* spec. nov. zwei neue Arten beschrieben. Für alle paläarktischen Spezies wird eine Bestimmungstabelle gegeben.

The four widely distributed species of *Sylvicola* HARRIS were well described in literature. They are *S. punctatus* (FABRICIUS), *S. fenestralis* (SCOPOLI), *S. cinctus* (FABRICIUS) and *S. zetterstedti* (EDWARDS) (LINDNER 1930; FREEMAN 1950; PEDERSEN 1968; HANCOCK 1989; SØLI 1992). The data on *S. fuscatus* (FABRICIUS) were presented in the work of H. ANDERSSON (1967). The female genitalia were figured in the works by PEDERSEN (1968), HANCOCK (1989) and SØLI (1992). Three species known from Japan [*S. japonicus* (MATSUMURA), *S. matsumurai* (OKADA) and *S. suzukii* (MATSUMURA)] were described by OKADA (1935) in detail.

This work contains short descriptions of the known species using additional characters and descriptions of 2 new species, close to *S. fuscatus* (FABRICIUS). Besides this the pictures of genitalia of all species are given. The material is deposited in the Zoological Museum, Berlin (ZMB), Deutsches Entomologisches Institut, Eberswalde (DEI), A. N. Severtsov Institute of Ecology and Evolution, Moscow (IEE) and Zoological Institute, Sankt-Petersburg [St. Petersburg] (ZIN).

¹ This study was in part supported by a grant of the Deutsche Forschungsgemeinschaft (DFG No 436 RUS 17-179-93).

Subgenus *Anisopus* MEIGEN, 1803

Subgenus *Anisopus* MEIGEN is described by the characters given in the key. The other characters are given in the work by PRATT & PRATT (1980).

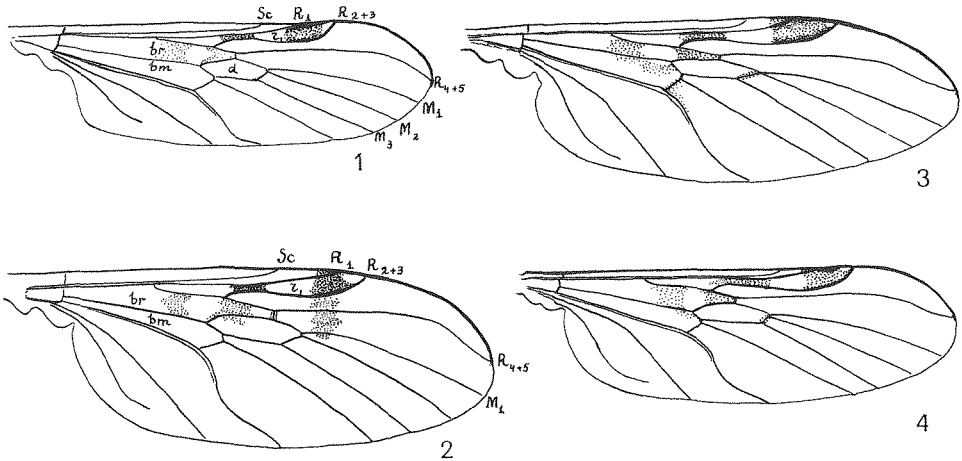


Fig. 1-4. Wing of female of *S. (Anisopus) fuscatus* (FABRICIUS) [1], *S. (Anisopus) punctatus* (FABRICIUS) [2]. Wing of male of *S. (Anisopus) subfuscatus* spec. nov. [3], *S. (Anisopus) stackelbergi* spec. nov. [4].

Sylvicola (Anisopus) fuscatus (FABRICIUS, 1775)

(Fig. 1, 5-6)

Material. Russia: Ussuriyskiy reserve, 40 km SE Ussuriysk, Primorskiy Kray, the larvae from cow dung, 10 ♂♂ and 2 ♀♀, 14.4.1969, 1 ♂, 12.9.1964, all leg. N. KRIVOSHEINA (IEE); Yakovlevka (Arsenyev), Spasskiy district, Primorskiy Kray, 1 ♂, 24.6.1927, leg. STACKELBERG (ZIN).

The species was identified basing on the work by H. ANDERSSON (1967), who redescribed *S. fuscatus* from swedish materials.

Male. Eyes holoptic, width of frons not exceeding facet diameter. Ocellar triangle black, face and occiput brownish, grey pollen. Occiput with long light rare hairs. Antenna and palpus dark, brown. Antennal segments short, their length not exceeding width. Thorax light brown, grey pollen, postpronotal lobe and notopleural suture orange. Mesonotum with 3 black distinct stripes, the median one is short, ending of the level of the base of wing, complete. There are light long hairs on the posterior surface of mesonotum. Scutellum with 2 long light apical setae and a bun of shorter light hairs. Legs light, coxae, femora and tibia yellowish, tarsi brown. Hind femora and tibia brownish at apex. Hind femora not darkened in the middle. Halteres light, yellowish. Four anterior abdominal segments light-brown, the rest dark brown. Posterior margin of the segments yellowish. Genitalia: fig. 5, 6. Wing brownish, apical half with dense macrotrichia. Discal cell with rare macrotrichia. Distinct brown spots present in median and apical parts of *r* 1, but apical part of *R* 2+3 light. Cell *br* with light transverse spot, reaching the base of discal cell. Body length to 7 mm. Wing 5 mm.

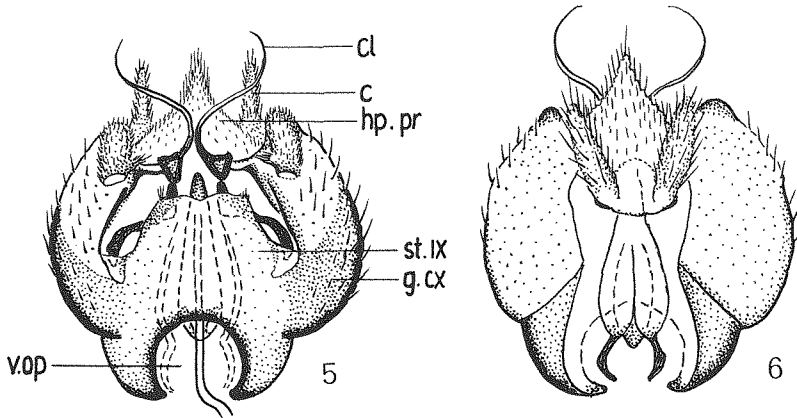


Fig. 5-6. Genitalia of *S. (Anisopus) fuscatus* (FABRICIUS) ventral and dorsal views [c - cerci, cl - claspett, g.cx - gonocoxite, hp.pr - hypoproct, st.IX - sternite IX, v.op - ventral opening].

Female. Eyes dichoptic, broadly separated. Frons almost as wide as eye (5:6). Surface of wing, including discal cell and apical parts of cells *br* and *bm* with dense macrotrichia. Other characters as in male.

Distribution. The data on the distribution of the species need confirmation. The revision of the materials of *S. fuscatus* (FABRICIUS) showed, that at least 3 species with different genital morphology were mentioned under this name in literature. It is possible now to tell about the registration in Scandinavia (ANDERSSON 1967) and Russian Far East. As for the distribution of the species in North America (PRATT & PRATT 1980), these data may be referred to the other, possibly new species.

Sylvicola (Anisopus) punctatus (FABRICIUS, 1787)

(Fig. 2, 7-8)

Material. Russia: near Murmansk, 1 ♀, 15.8.1923, leg. FRIDOLIN; Lakhta, Murmansk Region, 1 ♀, 13.5.1907, leg. JAKOBSON; Aleksandrovsk, Arkhangelsk Region, 1 ♂, 14.8.1970, leg. GORODKOV; 1 ♀, 31.8.1923, leg. FRIDOLIN; Berditsyno, Yaroslavl Region, 1 ♂, 15.7.1906, leg. JAKOVLEV; Udelnaya, near St.-Petersburg, Leningrad Region, 1 ♂, 21.4.1937; Yukki, 8 ♂♂ and 7 ♀♀, 13.7.1928, 26.7.1928, 8.8.1928, 17.8.1928, 5.9.1928, 25.6.1931, 16.8.1931; Yascera and Tolmachevo, near Luga, 16 ♂♂ and 1 ♀, 7.7.1937, 3.8.1937, 11.6.1957, 22.7.1957, 26.7.1957, 29.8.1957, 10.7.1959, 12.7.1960, 20.8.1962; Luga, 12 ♂♂ and 2 ♀♀, 18.6.1937, 10.8.1952, 20.7.1953, 4.8.1953, 18.8.1953, 27.8.1954; Gatchina, 2 ♂♂, 27.6.1940 and 9.5.1957; Gobzhitsy, 1 ♂ and 1 ♀, 30.7.1934; near St.-Petersburg, 1 ♂, 19.5.1922, leg. STAKKELBERG; 1 ♀, 20.7.1911, leg. JAKOBSON; 1 ♀, 22.9.1931, leg. BAROVSKI; Kaypolovo, near Gorskaya, 1 ♂, 19.8.1897, leg. BIRULJA; Lyasevo, near Siverskaya, 1 ♂, 31.7.1898, leg. KUSNEZOV (all ZIN); Ovrzhki, near Moscow, Moscow Region, 5 ♂ and 10 ♀♀, 13.8.1993, the larvae from cow dung, leg. ZAITZEV; near Shagonar, Tuva, 1 ♀, 2.4.1974, leg. KRIVOSHEINA (all IEE); near Irkutsk, 1 ♂, 6.7.1912, leg. KAJDALOV; near Krasnoyarsk, 1 ♂, 28.5.1905, leg. ANUCHINA; near Tobolsk, 1 ♂, 20.8.1935, leg. SANKO; near Tyungyulyu, 50 km ENE from Yakutsk, 3 ♂♂ and 3 ♀♀, 26.7.1989, 26.8.1989, leg. VINOKUROV; Verkhoysk, Yaku-

tiya, 1 ♂, 9.6.1909, Expedition of MARKGRAPHS (all ZIN); "Deime" [= river-bed between Polesk and Gvardeysk, E from Kaliningrad], 1 ♀, "Lazarettsschiffzug Danzig 3", 1914-1918, leg. HORN (DEI).

Ukraine: Kvasy, vic. Rakhov, Zakarpatye, 2 ♀♀, 30.6.1963, leg. KRIVOSHEINA (IEE); Kiev, 1 ♂, 4.8.1911, leg. WAGNER (ZIN).

Estonia: Peedu, 1 ♀, 29.7.1951, leg. STACKELBERG (ZIN).

Latvia: "Curland Libau", 5 ♂♂ and 3 ♀♀, without date, leg. SIEBERT (DEI).

Slovakia: Tatranska Lomniza, 5 ♂♂ and 1 ♀, 7.11.1961, leg. SYTSCHESKAJA (ZIN); "Kohl-bach" [Vysoké Tatry], 1 ♀, 3.8.1901, leg. OLDENBERG (DEI).

Germany: "Alp. Bav." ["Bayerische Alpen"; = Bavaria Alps, state of Bavaria], 2 ♂♂, 7.1904, from coll. Fränkisches Museum Würzburg, 1938; "Berlin, Schildhorn" [between Berlin-Grunewald and Berlin-Spandau], 1 ♀, 5.1898; 1 ♀, 16.8.1898; 2 ♂♂, 9.1898, all leg. OLDENBERG; Neusalza-Spremberg, 1 ♂, the larvae from cow dung, 5.10.-17.10.1940, leg. HENNIG; Berlin, Pichelsberg, 1 ♀, 16.6.1887; 1 ♀, 7.10.1906; 1 ♀, 4.10.1896; 6 ♀♀, 5.1897, all leg. OLDENBERG; Berlin-Grunewald, 5 ♀♀, 5.1898, 4.1897, 5.1897 and 8.1897, all leg. OLDENBERG; "Grunewald" [= Berlin-Grunewald], 1 ♀, 9.1896, leg. OLDENBERG; "Sylt, Marsch" [= island Sylt, marshland], 1 ♀, 25.8.1903, leg. OHAUS; "Borkum" [= island Borkum], 1 ♀, 8.1895, leg. OLDENBERG; Schön Münzsch [S of Gernsbach], 1 ♀, 8.1898, leg. OLDENBERG; "Weiler, Schwäb. Alb." ["Schwäbische Alb"; = hamlet, Swabian Mountains, state of Baden-Württemberg], 1 ♀, 28.8.1919, leg. OLDENBERG (all DEI).

Poland: "Wölfelgrund" [= Wilkanów, S of Kłodzko], 1 ♂, 15.6.1900, leg. LICHTWARDT and 1 ♂, 2.7.1905, leg. OLDENBERG (all DEI); "Kaltwasser" [between Legnica and Lubin], 1 ♂, without date, leg. DUDA; "Spitzberg [= Spitz-Berg, bei Nimptsch]" [E of Niemcza], 1 ♂, 17.5., leg. DUDA (all ZMB).

Czechia/Poland: "Riesengebirge" [= Sudeten Mountains], 1 ♂, 20.7.1909; leg. LICHTWARDT; "Riesengeb." ["Riesengebirge"; = Sudeten Mountains], 1 ♀, 23.7.1909, leg. LICHTWARDT (DEI).

Czechia: "Spindelmühle" [= Špindlerův Mlýn near Harrachov, Sudeten Mountains], 3 ♂♂, 8.1891, leg. OLDENBERG; 2 ♀♀, without date, leg. OLDENBERG; 1 ♀, without date, leg. LICHTWARDT (all DEI).

Austria: "Gastein" [= Badgastein], 1 ♀, 31.7.1907, leg. OLDENBERG; "Schlitters" [NE of Schwaz, province of Salzburg], 1 ♀, 17.7.1875 and 1 ♀, 18.7.1875, leg. OLDENBERG (all DEI).

France: Briey [NW of Metz], 1 ♂, 7.1916 and 1 ♀, 8.1916; Trélon [N of Hirson], 1 ♂, 1.6.1917; Longwy [on the border between Luxembourg and Belgium], 5 ♀♀, 9.1916, all from coll. Fränkisches Museum Würzburg, 1938 (all DEI).

Italy: "Trient" [= Trento], 1 ♀, 19.7.1899, leg. OLDENBERG; "S. Martino" [= San Martino; in the Dolomites], 1 ♀, 31.7.1914, leg. OLDENBERG (all DEI).

Sweden: "Gällivare, Lappland" [= Gällivare, Lule Lapmark; Norrbotten], 1 ♀, 7.1910, leg. OLDENBERG; Lappland, 1 ♂, 6.1901, leg. LICHTWARDT (all DEI).

Finland: Rajala, Saima Kanal, 1 ♀, 5.6.1907, leg. ADELUNG (ZIN).

Male. Eyes holoptic, contacting to the end of frons. Head dark brown, almost black, with light grey pollen. Occiput apically with black hairs. Antenna and palpus black. Scape and pedicel short, as long as wide. Thorax black with grey pollen. Postpronotal lobes brown. Mesonotum with 3 broad black separated stripes. Median stripe ends near the base of wing, almost complete. Narrow light stripe, dividing it, weakly developed. Scutellum with 2 long brown apical setae and several short ones. Legs yellow, tarsi darker. The apexes of hind femora and tibia darkened. Halteres yellow. Abdominal segments I-III dark brown, the rest black. Light posterior bands on abdominal segments I-IV narrow and hardly visible. Genitalia - fig. 7, 8.

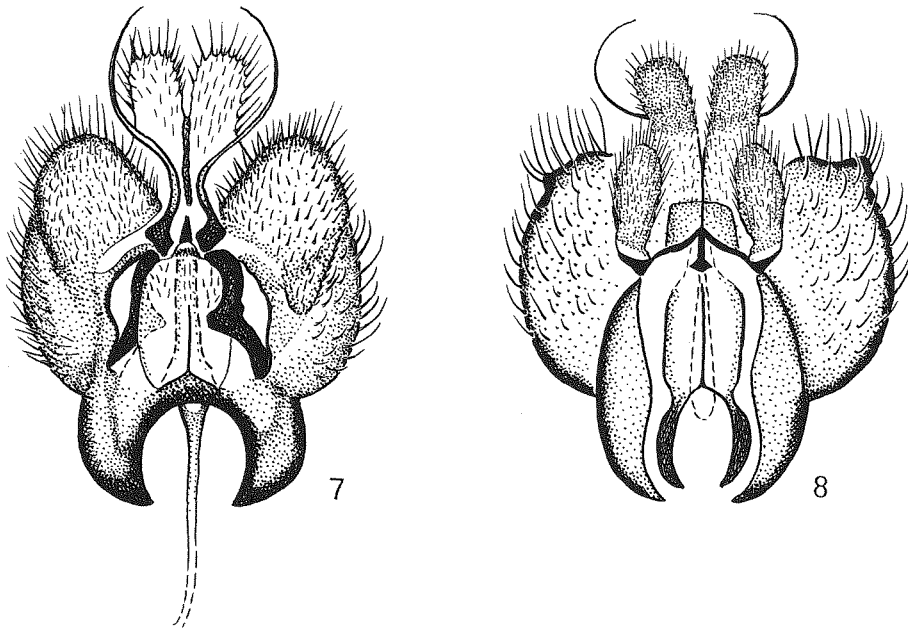


Fig. 7-8. Genitalia of *S. (Anisopus) punctatus* (FABRICIUS) ventral and dorsal views.

Wing brownish with darker veins. Wing surface on apical half and on posterior margin with dense macrotrichia. Discal cell and light area above it with rare macrotrichia. Dark spots reach *M* 1 and discal cell. Rather distinct dark spot is situated on the cell *br* just under the base of *R* 1 and *R* 4+5. Body length to 4 mm. Wing 3,5 mm.

Female. Frons almost as wide as eye (6:7). The other characters as in male. The figure of genitalia is given in the works by PEDERSEN (1968) and SØLI (1992). Body coloration varying. The specimens from old collections have light orange body, especially thorax and anterior abdominal segments.

Distribution. The species is widely distributed in Palaearctic, known from North America, but evidently rare in Asia, was not registered in Japan and Russian Far East.

Sylvicola (Anisopus) stackelbergi spec. nov.

(Fig. 4, 9-11)

Holotype: 1 ♂, St.-Petersburg (Russia), 9.5.1921, leg. STACKELBERG.

Paratypes: Russia: 1 ♂ and 1 ♀, near the lake Vudyavr, Khibin mountains, Murmansk Region, leg. FRIDOLIN; 1 ♂, island Solovetsky, 13.6.1932, leg. KISHKIN; 1 ♂, Yascera, near Luga, Leningrad Region, 20.8.1962, leg. STACKELBERG; 1 ♂, St.-Petersburg, 17.8.1922, leg. BIANKI (ZIN); 1 ♂, Nakhabino, Moscow Region, 20.6.1961, leg. KRIVOSHEINA (IEE).

Male. Eyes holoptic, frons not wider than facet diameter. Face brown, occiput black. Head grey pollen. Antenna brownish, scape and pedicel as long and wide. Basal palpa segments light yellow, apical brown. Thorax brown, grey pollen. Postpronotal lobes and notopleural sutures orange. Mesonotum with 3 blackish stripes, median of which is double, separated by narrow long grey stripe. Median stripe not reaching scutellum, ending near the base of wing. Long

bristles of mesonotum light. Scutellum with 2 long light thin apical setae and several weaker white hairs. Legs light, yellowish. Hind femora and tibia with dark apical rings, femora without median dark ring. Tarsi brown. Halteres with dark yellow knob. Abdominal segments I-IV light brown, the rest dark. All the segments without light posterior stripes. Pubescence light. Genitalia - fig. 9-11. Wing uniformly brownish, veins darker. Macrotrichia on the apical half of wing present. The areas of wing in front of discal cell mainly bare. Cell *r* 1 with 2 distinct dark spots, separated by light spot. Apex of *R* 2+3 light. Oval light spot on the cell *br* reaches the base of discal cell. Body length to 8,5 mm. Wing to 7 mm.

Female. Frons wide. Eye only 1,5 times as wide as frons. The other feature as in male.

Distribution. North, north-west and central regions of the european part of Russia.

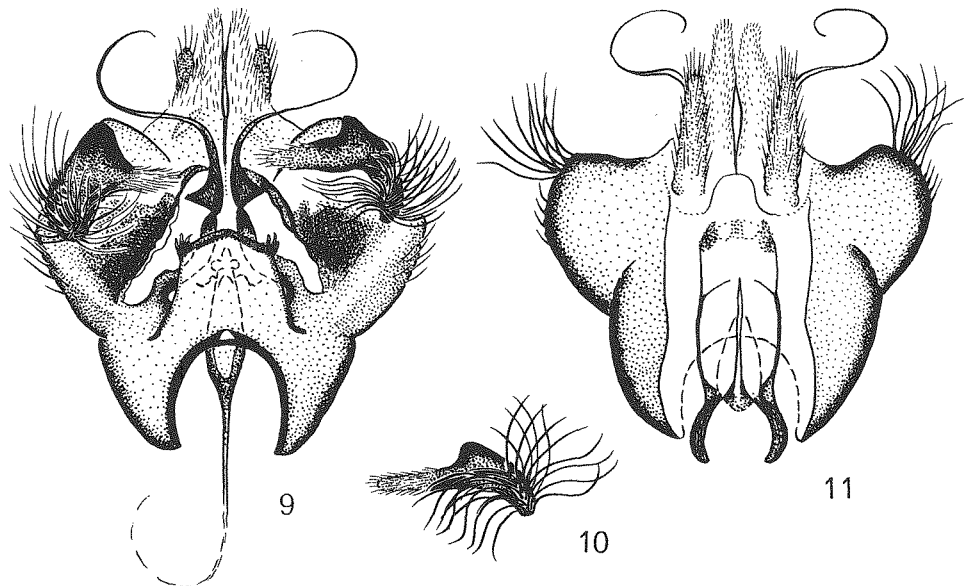


Fig. 9-11. Genitalia of *S. (Anisopus) stackelbergi* spec. nov.: 9, 11 - ventral and dorsal views; 10 - apex of gonocoxite.

Sylvicola (Anisopus) subfuscatus spec. nov.

(Fig. 3, 12-15)

Holotype: 1 ♂, Medveshiy Vorota, near Krasnaya Polyana, Krasnodarskiy Kray (Russia), 19.7.1971, leg. MAMAEV (IEE).

Paratypes: Russia: 1 ♂ and 1 ♀, Teberda, Nord Kaukasus, 15.4.1964, 8.5.1964, leg. GORODKOV.

Germany: Charlottenbrunn [in Berlin], 1 ♂, without date and collector (ZMB); München, 2 ♂♂, 5.1911, from coll. Fränkisches Museum Würzburg, 1938; Blankenburg, 1 ♂, 8.1897, leg. OLDENBERG; "Alp. Bav." ["Bayerische Alpen"; Bavaria Alps, state of Bavaria], 1 ♂, 1.11.1924; 1 ♂, 9.10.1915 and 1 ♀, 23.9.1918, all from coll. Fränkisches Museum Würzburg, 1938 (all DEI).

Austria: "Gastein" [= Badgastein], 1 ♂, 18.7.1907; 1 ♀, 1.8.1907; 1 ♀, 1.7.1907; 1 ♀, 21.7.1907; 2 ♀♀, 10.7.1907; 2 ♀♀, 26.7.1907; 1 ♀, 28.6.1907; 1 ♀, 28.7.1907; 2 ♀♀, 15.7.1907;

2 ♀♀, 25.7.1907, all leg. OLDENBERG; Lochau [N of Bregenz], 1 ♂, 11.7.1906, leg. OLDENBERG; "Austria inf.", Wien, 1 ♀, leg. LICHTWARDT; "Nassfeld, Gastein" [= "Naßfeld", near Badgastein], 1 ♀, 27.7.1907, leg. OLDENBERG; "Schlitters" [NE of Schwaz, province of Salzburg], 4 ♂♂ and 1 ♀, 18.7.1925; 1 ♀, 17.7.1926, all leg. OLDENBERG (all DEI); Waldegg [Karnian Alps], 1 ♂, ? 1928; leg. ? OLDENBERG (ZMB).

France: 1 ♂ and 1 ♀, Longwy [on the border between Luxembourg and Belgium], 9.1916, from coll. Fränkisches Museum Würzburg, 1938 (DEI).

Italy: Macugnaga [NO of Monte Rosa, Lombardei], 3 ♂♂, 28.7.1900; 1 ♂, 7.8.1900; 1 ♂, 8.8.1900; 1 ♂, 25.7.1900; 1 ♀, 9.8.1900, all leg. OLDENBERG (all DEI).

Switzerland: Thusis, "Graubünd" [in the Grisons], 2 ♂♂, 3.9.1910 and 30.7.1910, leg. WAGNER; Sedrun [in the Grisons], 1 ♂, 20.4.1945, without collector (all ZIN); Linthal [E of Luzern], 1 ♂, 16.6.1912, leg. OLDENBERG; "Wallensee" [= Walensee, near Walenstadt], 400 m, 1 ♀, 8.7., from coll. Fränkisches Museum Würzburg, 1938 (all DEI).

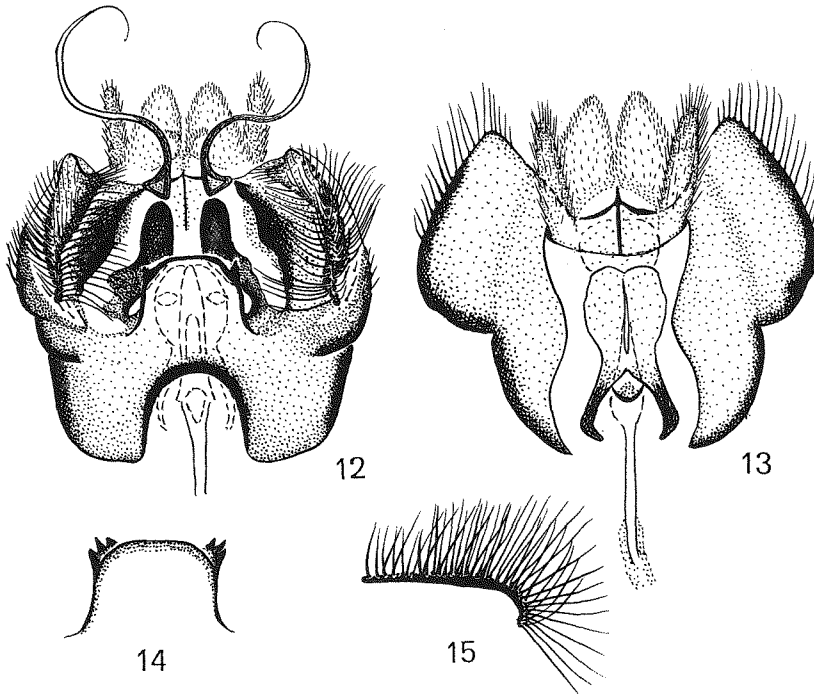


Fig. 12-15. Genitalia of *S. (Anisopus) subfuscatus* spec. nov.: 12, 13 - ventral and dorsal views; 14 - sternum IX; 15 - apex of gonocoxite.

Male. Eyes holoptic, frons not exceeding the width of facet of eye. Face and occiput black, grey pollen. Occiput with long light hairs. Antenna and palpus dark brown. Scape is slightly longer, than pedicel. Thorax brown-black, postpronotal lobes brown. Thorax grey pollen. Mesonotum with 3 wide black stripes. The median stripe not reaching scutellum, ends near the base of wing, distinctly double, separated by well developed grey median stripe. Rare light and dark hairs present on posterior part of mesonotum. Scutellum with 2 brownish thin apical setae

and a bun of light hairs, which are sometimes as long as the setae. Legs light, yellowish, tarsi darker. Hind femora and tibia darkened at apex. Halteres light, whitish. Abdominal segments I-III light brown, the rest - dark. Pubescence light. Genitalia - fig. 12-15. Wing relatively light, slightly brownish, veins dark brown. Dense macrotrichia cover the most part of wing surface, including apical part of *bm* and median part of *br*. Light spot on *br* cell large, covering the base of discal cell. Apex of *r 1* light. Body length to 8 mm. Wing 6 - 6,5 mm.

Female. Frons wide. Eye only 1,5 times as wide as frons. The other feature as in male.

Distribution. The species is widely distributed in Europe, common in mountain regions.

Subgenus *Sylvicola* HARRIS, 1776 s. str.

The subgenus *Sylvicola* HARRIS s. str. is described by the characters, given in the key.

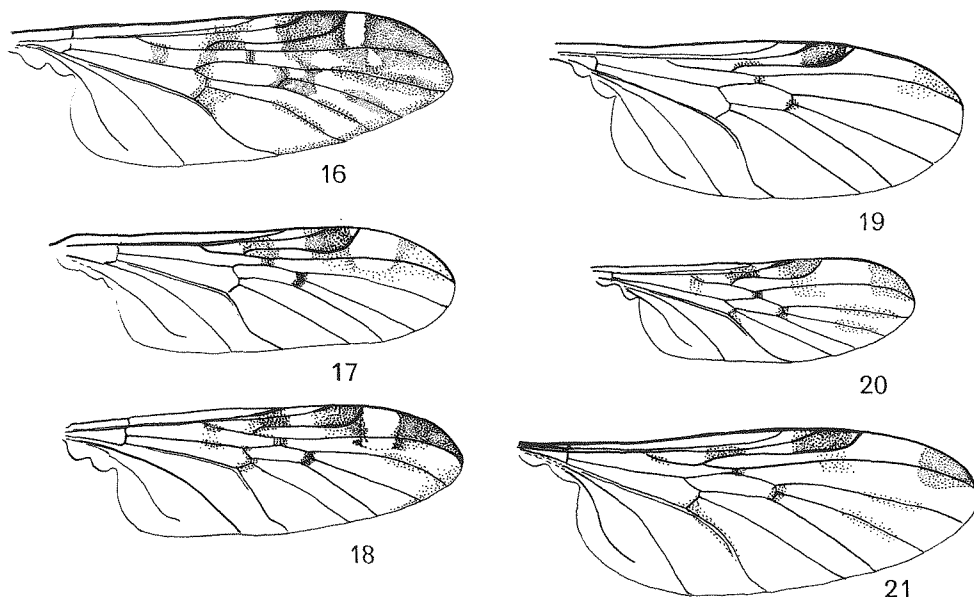


Fig. 16-21. Wing of female of *S. (Sylvicola) suzukii* (MATSUMURA) [16], *S. (Sylvicola) matsumurai* (OKADA) [17]; of male of *S. (Sylvicola) japonicus* (MATSUMURA) [18]; of female of *S. (Sylvicola) limpidus* (EDWARDS) [19], *S. (Sylvicola) cinctus* (FABRICIUS) [20]; of male of *S. (Sylvicola) zetterstedti* (EDWARDS) [21].

Sylvicola (Sylvicola) cinctus (FABRICIUS, 1787)

(Fig. 20, 22-23)

Material. Russia: near the lake Vudyavr, Murmansk Region, 1 ♂, 9.7.1933, leg. FRIDOLIN; Solvychevodsk, Arkhangelsk Region, 2 ♂♂, 2.9.1981, leg. GORODKOV; island Solovetsky, 1 ♂, 31.6.1932, leg. KISHKIN; Tolmachevo, Yascera, Sablino [near Luga], Leningrad Region, 4 ♂♂, 8.8.1924, 2.8.1935, 4.7.1936, 20.8.1962, leg. STACKELBERG; Udelnaya, N. Petergof [near St.-Petersburg], 3 ♂♂ and 1 ♀, 13.8.1900, 23.8.1935, 3.5.1956, 9.5.1958, leg. GILDEBRANDT, STACKELBERG; river Tigoda, Novgorod Region, 1 ♂, 16.6.1905, leg. SEMENOV; Berditsyno, Yaroslavl Region, 1 ♀, 1.9.1907, leg. JAKOVLEV (all ZIN); Kadnikovskiy, Vologda Region, 5 ♂♂

and 4 ♀♀, 3.7.- 20.7.1962; Nikolskoe, near Kubenskoe, Vologda Region, 9 ♂♂ and 28 ♀♀, 30.6.-5.7.1983; Sokolovskaya, Moscow Region, 1 ♀, 4.5.1959; Krasnaya Pakhra, Moscow Region, 1 ♂, 12.6.1972; near Scekino, Tula Region, 2 ♂♂ and 10 ♀♀, 13.6.- 17.6.1958; Severskaya, Krasnodarskiy Kray, 5 ♂♂, 21.7.-1.8.1970, all leg. KRIVOSHEINA; Novo-Prokhladnoe, Nord Kaukasus, 1 ♂ and 4 ♀♀, 25.5.-26.5.1959, 16.6.1959; Krasnaya Polyana, Nord Kaukasus, 4 ♀♀, 12.7.1966, all leg. MAMAEV; Artybash, bank of the lake Teletskoye, Altai, 3 ♂♂ and 1 ♀, 20.6.1981, 30.6.1981, 5.7.1981, 20.7.1981, leg. KRIVOSHEINA, ZAITZEV (all IEE).

Latvia: "Curland Libau", 3 ♂♂, without date, leg. SIEBERT.

Ukraine; near Kvasy, Zakarpatyje, 2 ♂♂ and 4 ♀♀, 19.6.1963; near Rakhov, Zakarpatyje, 8 ♂♂ and 6 ♀♀, 24.6.-30.6.1966, 13.7.1966, all leg. KRIVOSHEINA (IEE); Kiev, 1 ♂ and 1 ♀, 23.11.1924, leg. RIELSKY (ZMB).

Azerbaijan: Avrora, near Lenkoran, 1 ♂, 25.5.1980, leg. KRIVOSHEINA (IEE).

Germany: "Province Brandenburg" [state of Brandenburg], 1 ♂, leg. MEHR; Berlin-Johannisthal, 1 ♂, 17.6.1986, leg. SCHUMANN (all ZMB); Berlin-Jungfernheide, 1 ♂, 6.5.1900, leg. LICHTWARDT; Leipzig, 1 ♂, 14.10.1920, leg. OLDENBERG; "Schwäb. Gmünd" [= Schwäbisch Gmünd, E of Stuttgart], 1 ♂, 26.6.1925, leg. OLDENBERG; Berlin, Müggelsee, 1 ♂, 8.8.1900, leg. LICHTWARDT; Bavaria, Tegernsee, 1 ♂, 15.7.1929, leg. OLDENBERG; Berlin, 4 ♂♂, without date, leg. WOLF; Berlin, Pichelsberg, 2 ♂♂, May 1897, leg. LICHTWARDT (all DEI).

Austria: Admont, 1 ♂, 15.8.1925, leg. OLDENBERG.

Italy: "Trient" [= Trento], 1 ♂, 4.7.1911, leg. OLDENBERG; Pinzolo [NW of Trento], 1 ♂, July 1919, leg. OLDENBERG.

Poland: "Pangelberg, bei Nimptsch" [near Niemcza], 1 ♂, 6.6.1913, leg. DUDA; "Nimptsch, Schlesien" [= Niemcza, Silesia], 1 ♂, 6.4.1911, leg. DUDA; "Guhlau" [= Gola; between Głogów and Wschowa], 1 ♂, without date, leg. DUDA (all ZMB).

Czechia: "Spindelmühle" [= Špindlerův-Mlýn near Harrachov, Sudeten Mountains], 1 ♂, 8.9., leg. LICHTWARDT.

Finland: Rajala, Saima Kanal, 1 ♂, 1.7-3.7.1910, leg. ADELUNG (ZIN).

Male. Eyes dichoptic, the relation of the width of frons to the width of eye is 2:7. Head, including face, dark-brown, grey pollen. Occiput with long light hairs. Scape and pedicel of antenna light, yellowish or brownish, flagellum brown. All antennal segments short, no longer than wide. Rostrum red, palpus brown. Thorax light, red, anepisternum slightly darker. Mesonotum unicolorse, without stripes in specimens from old collections and with hardly noticeable undistinct brownish or greyish stripes in other specimens. Median stripe not double, not divided in two by narrow light stripe. Scutellum with 2 long dark apical diverging setae. Several setae of the same structure present on mesonotum in front of scutellum. Legs light, yellow, tarsi slightly darkened. Hind femora and tibia apically darkened, besides this hind femora with weak dark median spot. Halteres with yellow knob. Abdomen brownish-yellow, posterior part of abdominal segments I-VI whitish. Genitalia - fig. 22, 23. Wing brownish. The bases of medial veins are situated at equal distance from each other. Dense macrotrichia present on the whole surface of wing, except its base. The spots of wing weakly developed. Body length to 7 mm. Wing to 5,5 mm.

Female. The relation of the width of frons to the width of eye is 2:3. Face light, yellowish. Median stripe of mesonotum not reaching scutellum, ending near the base of wing. Other characters as in male. The figures of genitalia are given in the works by PEDERSEN (1968), HANCOCK (1989) and SØLI (1992).

Distribution. The species is very common in collections. It is evidently widely distributed in Europe. The old data about *S. fenestralis* are related as a rule with this species. No data on the distribution in Asia.

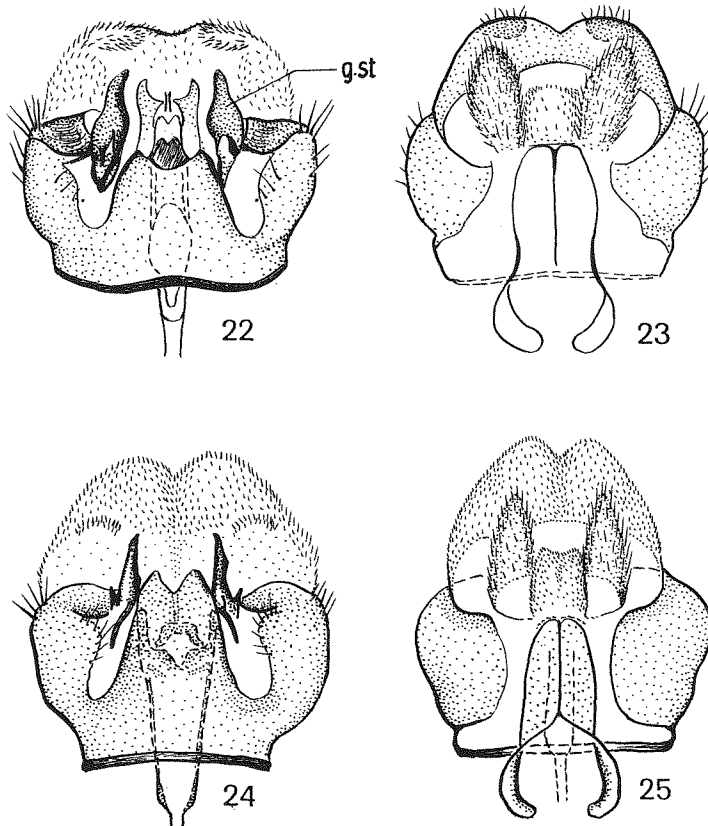


Fig. 22-25. Genitalia, ventral and dorsal views: 22, 23 - *S. (Sylvicola) cinctus* (FABRICIUS), 24, 25 - the same, *S. (Sylvicola) fenestralis* (SCOPOLI) [g.st - gonostyle].

***Sylvicola (Sylvicola) fenestralis* (SCOPOLI, 1763)**

(Fig. 24, 25)

Material. Russia: near the lake Vudyavr, Murmansk Region, 1 ♂ and 1 ♀, 16.9.1936, leg. FRIDOLIN; near Pechenegskogo monastery, Arkhangelsk Region, 1 ♂, 8.7.1910, leg. FRIDOLIN; near St.-Petersburg [Gobzhitsy, Udelnaya], 2 ♂♂ and 1 ♀, 17.8.1924, 12.8.1931, 3.10.1940, leg. JAKOBSON, STACKELBERG (all ZIN).

Latvia: "Kurland", 1 ♂, leg. SIEBERT (DEI).

Germany: "Province Brandenburg" [state of Brandenburg], 2 ♂♂, leg. MEHR (ZMB). Berlin, "Hauskeller" [in the basement], 1 ♂, 15.7.1898, leg. LICHTWARDT; Berlin, 1 ♂, 12.6.1899, leg. LICHTWARDT; Berlin, Jungfernheide, 1 ♂, 6.5.1900 and 1 ♂, 9.8.1896, leg. LICHTWARDT (all DEI).

Male. Eyes dichoptic. The relation of the width of frons to the width of eye is 1:3. Head dark brown in grey pollen. Occiput with long light hairs. Antenna and palpus dark brown, scape and pedicel short, of equal size, no longer than wide. Thorax dark brown, mesonotum light orange, pleuron brownish in grey pollen. Postpronotal lobes red. Mesonotum with 3 dark brown broad

stripes, median of which double, divided with indistinct narrow light stripe. Scutellum with 2 brown long apical setae. Legs yellow-brown. Coxa, femora and tibia yellow, tarsi brownish. Hind femora and tibia with dark apical ring. Hind femora slightly darkened on the middle. Halteres yellow. Abdominal segment I yellow, II-V dark anteriorly and red posteriorly. The end of abdomen dark. Genitalia - fig. 24, 25. Wing brownish with indistinct light and dark spots. The distance between the bases of *M 1* and *M 2* is less than the distance between *M 2* and *M 3*. The wing on the most surface with dense macrotrichia, except the base of wing near humeral vein. Body length 6 mm. Wing 5 mm.

Female. Frons 2/3 times as wide as eye. Dark stripes of mesonotum more distinct. Lateral stripes dark brown. Median stripe short, ending near the base of wing, simple, complete. Other characters as in male. The figures of genitalia are given in the works by PEDERSEN (1968), HANCOCK (1989) and SØLI (1992).

Distribution. The species is not common in collections. Many specimens of *S. cinctus* were incorrectly referred to this species. The species is typical for northern and central regions of Europe. The other data need confirmation. Data on the distribution in Asia are absent.

Sylvicola (Sylvicola) japonicus (MATSUMURA, 1915)

(Fig. 18, 26, 27)

Material. Russia: Mendelevo, island Kunashir, 3 ♂♂, 18.7.1977, leg. ZAITZEV (IEE).

Male. Eyes holoptic. Face yellow, occiput brown, both grey pollen. Occiput with black hairs in the upper half and light hairs in the lower half. Thorax light brown, grey pollen. Postpronotal lobes, notopleural sutures and borders of pleuron reddish. Mesonotum with 3 dark brown stripes. Median stripe double, short, divided by distinct grey stripe, ends near the base of wing. Scutellum with 2 long diverging brownish apical setae, prescutellar setae of the same length present on mesonotum. Legs yellow, apical tarsomeres darker. Hind femora and tibia with dark apical ring, 2 times as wide as femur. Halteres yellow. Abdomen unicolorsely brown without posterior light bands. Abdominal segments I-IV light brown, the rest darker. Genitalia - fig. 26, 27. Wing brownish with distinct spots. The most surface of wing with macrotrichia, including discal cell, and apical half of *br* and *bm*. The distance between bases of *M 1* and *M 2* equal to or 1,5 times more than the distance between *M 2* and *M 3*. Wing apex near *R 4+5* strongly darkened. Light spot situated behind *R 2+3* with distinct borders. Two distinct dark spots surround light spot behind *R 4+5*. Body length 4,5 mm. Wing 3,5 mm. The species was described by OKADA (1935, 1938), but the figure of genitalia is not very clear, and the differences from *S. matsumurai* given in the key not distinct. The note that the species is the possible synonym of the european *S. zetterstedti* was not proved.

Female. The characters as in male (OKADA 1935).

Distribution. The species was described from Hokkaido, registered on Honshu. Kiushu (Japan); in Korea; island Kunashir, Urupp (Russia).

Sylvicola (Sylvicola) limpidus (EDWARDS, 1923)

(Fig. 19, 28)

Material. Slovakia: "Kohlbach" [Vysoké Tatry], 7 ♂♂ and 6 ♀♀, 7.8.1901; 1 ♀, 26.7.1901; 1 ♂, 29.7.1901; 1 ♂ and 1 ♀, 6.8.1901, all leg. OLDENBERG (DEI).

Austria: "Gastein" [= Badgastein], 2 ♂♂, 29.6.1907; 9 ♂♂ and 2 ♀♀, 18.7.1907; 1 ♂ and 3 ♀♀, 10.7.1907; 1 ♀, 19.7.1907; 1 ♀, 22.7.1907; 5 ♂♂, 1.8.1907; 1 ♂, 20.7.1907, all leg. OLDENBERG; Admont, 1 ♂ and 3 ♀♀, 1.8.1925; 2 ♀♀, 6.8.1925; 1 ♀, 20.8.1925; all leg. OLDENBERG; "Nassfeld" [= "Naßfeld", near Badgastein], 2 ♂♂, 27.7.1921, leg. OLDENBERG; "Plöcken" [Gailtal, Karnian Alps], 1 ♀, 7.8.1928, leg. OLDENBERG (all DEI).

Italy: "Schwefelbad Ratzes" [13 km E of Bolzano, in the Dolomites], 1 ♂, 23.7.-24.7.1911, leg. OLDENBERG; "Ratzes" ["Schwefelbad Ratzes"; 13 km E of Bolzano, in the Dolomites], 1 ♀, 7.1911 and 1 ♀, 23.7.1911, leg. OLDENBERG (all DEI).

Germany: Arber [5 km SW of Bayer. Eisenstein, state of Bavaria], 1 ♂, 27.7.1921; 1 ♀, 28.7.1921; 2 ♀♀, 29.7.1921; all leg. OLDENBERG; "Eisenstein" [= Bayer. Eisenstein, state of Bavaria], 1 ♀, 9.7.1921; 1 ♀, 18.7.1921; 1 ♀, 22.7.1921; 1 ♂, 24.7.1921, all leg. OLDENBERG (all DEI).

Poland: "Wölfelsgrund" [= Wilkanów, S of Kldzko], 4 ♂♂ and 1 ♀, 1.7.1905; 1 ♂ and 1 ♀, 4.8.1922; 1 ♂, 12.7.1905; 1 ♀, 30.7.1922; 1 ♀, 2.8.1922; all leg. OLDENBERG; "Reinerz" [= Duszniki Zdr., W of Kldzko], 1 ♀, 4.7.1916; 2 ♂♂, 6.7.1916; 1 ♀, 17.7.1916; 1 ♀, 3.8.1916; 1 ♀, 8.8.1916; all leg. OLDENBERG (all DEI).

Male. Eyes dichoptic. Frons 3/4 as wide as eye. Head dark brown, face yellowish. The surface of head grey pollen. Occiput completely with long light hairs. Scape and pedicel light, yellowish; flagellum black. All the flagellomeres short, not longer than wide. Palpus brown.

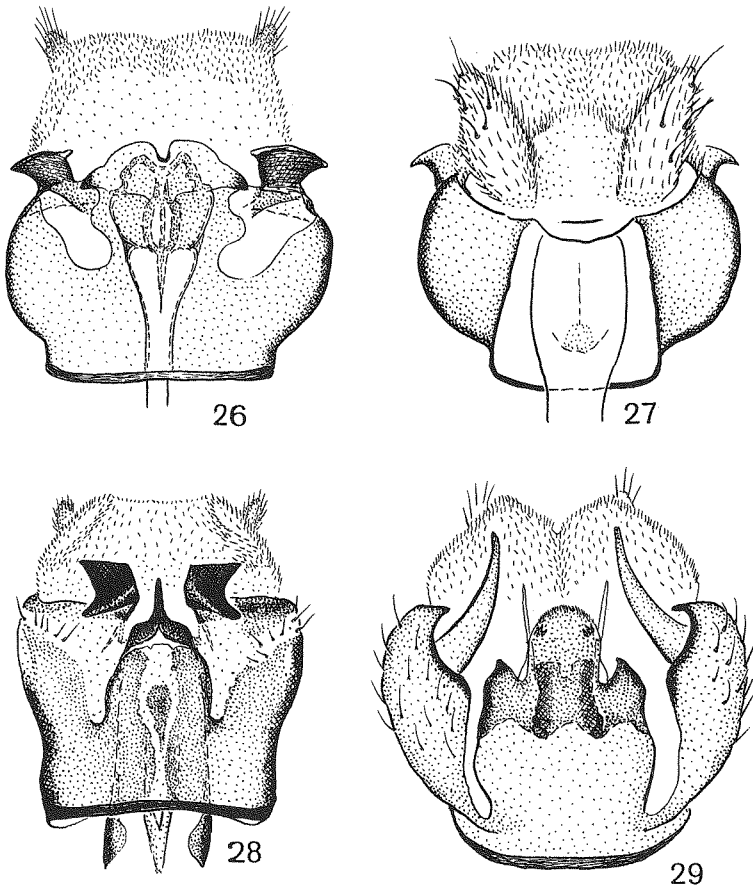


Fig. 26-29. Genitalia: 26, 27 - *S. (Sylvicola) japonicus* (MATSUMURA) ventral and dorsal views; 28 - *S. (Sylvicola) limpidus* (EDWARDS) ventral view; 29 - *S. (Sylvicola) matsumurai* (OKADA) ventral view.

Thorax, including postpronotal lobes, uniformly colored, light, brownish, in grey pollen. Mesonotum with indistinct dark spots near wing base and indistinct double median stripe. Pubescence of the thorax light. Scutellum with 2 apical long thin setae and several short hairs. Legs light-yellow, without dark rings and bands. Tarsus darker because of dense dark pubescence. Halteres dark. Abdomen orange with dark end. Abdominal segments I-IV (V) darkened anteriorly and whitish posteriorly. Genitalia - fig. 28. Wing yellowish with darker veins. The surface of wing completely, including cells *br* and *bm* and anal lobe with dense macrotrichia. The bases of medial veins widely separated and at equal distance from each other. A small brown spot is situated on the apical part of *r 1*, the second spot indistinct. *rm*, bases of medial veins and apex of *R 4+5* slightly darkened. Body length 5 mm. Wing 4,5 mm.

Female. The relation between width of frons to width of eye is 5:6. Frons slightly convex. Other characters as in male.

Distribution. The species is distributed in Europe.

Sylvicola (Sylvicola) matsumurai (OKADA, 1935)

(Fig. 17, 29)

Material. Russia: Ussuriysky reserve, 40 km SE Ussuriysk, Primorskiy Kray, 6 ♂♂, 27.9.1968; Mendeleevo, island Kunashir, 3 ♂♂ and 3 ♀♀, 5.10.-10.10.1972 and 1.11.1972, all leg. KRIVOSHEINA (all IEE).

Male. Eyes holoptic. Face yellowish, occiput black, head surface in grey pollen. Occiput with long light hairs. Antenna and palpus brownish. Scape 1,5 as long as pedicel. Thorax light-brown with light greyish pollen. Mesonotum unicolorsely brownish without dark stripes, setae dark. Scutellum with 2 long strong apical bristles. Legs yellow, tarsus darker. Hind femora and tibia with light-brown apical rings. Halteres with dark grey knob. Abdomen unicolorse, tergites without light posterior bands. Abdominal segments I-III light brown, the rest darker. Genitalia - fig. 29. Wing brownish with light and dark spots on anterior margin. Medial veins separated in base, distance between *M 1* and *M 2* is slightly lesser than between *M 2* and *M 3*. Macrotrichia are situated at the margin of wing. Central parts of wing - cells *d*, *br* and *bm* only with few macrotrichia. Wing with distinct dark spots in the middle and on the apex of *r 1*, as well as near the apex of wing on the end of *R 4+5*, the most apex of *R 2+3* is light. The rest of the wing surface is uniformly slightly darkened. Light spots indistinct. Body length 4,5 mm. Wing 4 mm.

Female: resembles male.

Distribution. The species was described from island Hokkaido, was registered on Honshu (Japan), known from islands Sachalin, Kunashir and Shikotan (Russia) (OKADA 1938). We discovered this species from island Kunashir.

Sylvicola (Sylvicola) suzukii (MATSUMURA, 1916)

(Fig. 16, 30, 31)

Material. Japan: Nakha, Okinawa, 1 ♂ and 1 ♀, 28.12.1926, leg. SCHMIDT (ZIN).

Male. Eyes holoptic. Face yellowish, occiput dark brown with long white hairs. Head in grey pollen. Scape and pedicel light, yellowish. Flagellum dark brown. Scape elongated, 2 times longer than wide and 2 times longer than pedicel. Palpus orange-brown. Thorax orange, weakly pollen. Mesonotum with 3 broad brown stripes, median of which is double, separated by narrow grey stripe. Anterior half of mesonotum with light setae, posterior half with dark setae. Scutellum with 2 brown apical bristles. Fore and mid legs yellow, weak brownish spots present in the middle of femora. Tarsi brownish. Hind femora orange, with distinct wide brown median ring, 3,5-4 times as wide as femora. Hind femora darkened apically. Hind tibia darkened basal-

ly and apically, light in the middle. Hind tarsi brownish. Halteres with dark grey knob. Abdominal segment I-IV light brown with narrow yellow posterior bands. Middle areas of tergites with dark ring. The end of abdomen black. Genitalia - fig. 30, 31. Wing brownish, darker anteriorly. Anterior margin and apical third of wing with rather dense macrotrichia. Cells *d*, *br*, *bm* almost bare. Bases of *M 1*, *M 2* and *M 3* at equal distance from each other. Dark spot of *r 1* reaches its apex. Two distinct white oval spots situated behind *r 1*, over and below *R 4+5* are not united. Spot below *R 4+5* moved to the apex of wing. Body length 5,5 mm. Wing 4,5 mm. **Female.** The characters as in male (OKADA 1935).

Distribution. The species was described from Honshu [holotype], Shikoku and Kyushu (OKADA 1935). We discovered 2 specimens from Okinawa in the collection of the ZIN.

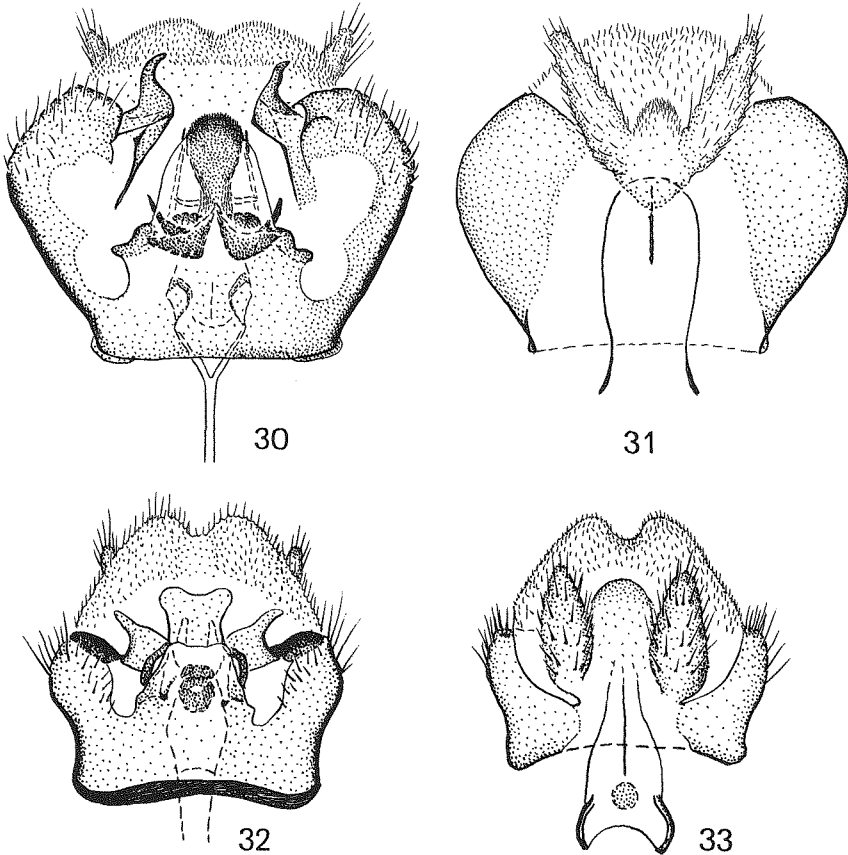


Fig. 30-33. Genitalia, ventral and dorsal views: 30, 31 - *S. (Sylvicola) sukuzii* (MATSUMURA); 32, 33 - *S. (Sylvicola) zetterstedti* (EDWARDS).

Sylvicola (Sylvicola) zetterstedti (EDWARDS, 1923)
(Fig. 21, 32, 33)

Material. Russia: Kireykovo, Kaluga Region, 1 ♂, 2.6.1992, leg. ZAITZEV (IEE).

Sweden: Abisco, 1 ♂, July 1910, leg. OLDENBERG (DEI).

Switzerland: "Furca" [= "Furka-Paß", W of St. Gotthard], 1 ♂, July, without collector (ZMB).

Male. Eyes holoptic, divided by narrow stripe, which is not wider than the diameter of 1-1,5 facet. Face brownish, occiput black, in grey pollen, with light hairs. Antennae and palpi black, pedicel orange or light grey apically. Scape no longer than wide. Thorax orange, anepisternum and katepisternum darker, brown. Mesonotum with 3 broad brown stripes. Median stripe simple, complete, narrowed posteriorly and reaching scutellum. All parts of thorax weakly grey pollen. Scutellum with 2 long brownish apical bristles. Prescutellar setae strong. Legs yellowish-brown. Femora and tibia yellowish, tarsi brown. Hind femora and tibia darkened apically. Halteres yellow. Abdominal segments I-IV reddish-brown with posterior light bands. Last segment dark brown. Genitalia - fig. 32, 33. Wing light slightly yellowish. The surface of wing with long dense macrotrichia except small area near humeral vein. Distance between *M 1* and *M 2* 1,5 times as long as distance between *M 2* and *M 3*. Dark spots present near the apex of *r 1*, *R 4+5* and in bases of medial veins. Small dark spots are situated on *rm* and *mcu*. Dark spot under the tip of *R 2+3* is very weak. Body length 6 mm. Wing 5 mm.

Female. Resembles male. The description of morphology is given in the work by HANCOCK (1989).

Distribution. The species was registered in Scandinavia and England. We discovered it in the centre of the European part of Russia, in Kaluga Region. The materials kept in DEI prove its distribution in Sweden and in ZMB - in Switzerland.

Key to the species of the genus *Sylvicola* HARRIS

- 1 The bases of veins *M 1* and *M 2* converging in one point. In case there are transverse vein between them, then it is no more than 1/4-1/6 as long as the vein between *M 2* and *M 3*. Eyes of male holoptic. Wing without dark spot on the apical part of *R 4+5*. Male genitalia with basal ring, having deep ventral opening. Hypoproct with 1-2 apical lobes, brought together in bases, philament claspett thin, S-curved. Subgenus *Anisopus* MEIGEN 2
- The bases of medial veins not brought together, the distance between *M 1* and *M 2* no lesser than 2/3 times as long as, or equal or exceeding the distance between *M 2* and *M 3*. Eyes of male holoptic or dichoptic, separated by wide frons. Wings with dark spot of varying intensity on the apex of *R 4+5*. Male genitalia not deeply concave ventrally; hypoproct without lobes, philament claspett not developed. Subgenus *Sylvicola* HARRIS s. str. 5
- 2 Wing with dark band under *R 2+3* (fig. 2). Hypoproct with 2 finger-like broadly rounded lobes (fig. 7, 8). *S. (Anisopus) punctatus* (FABRICIUS)
- Wing without dark spot or band under *R 2+3*. Hypoproct with 1-2 lobes of other shape (fig. 5, 9, 12). 3
- 3 Hypoproct with one pointed lobe. The apex of gonocoxite with a small oval plate, carrying short hairs. *S. (Anisopus) fuscatus* (FABRICIUS)
- Hypoproct with paired apical lobes. The apex of gonocoxite with strongly sclerotized elongated plate carrying long golden hairs. 4
- 4 Lobes of hypoproct long, narrow, brought together. Gonocoxite apically with sclerotized plate, carrying long internal projection. Long golden hair present only in basal half of plate, forming well noticeable bun. *S. (Anisopus) stackelbergi* spec. nov.
- Lobes of hypoproct short, blunt, conelike, as long or slightly longer than wide. Gonocoxite apically with simple elongated plate, carrying on the whole length rows of dense curved interiorly long golden setae, forming a comb. *S. (Anisopus) subfuscatus* spec. nov.

- 5 Wing with weakly developed yellowish spots on the apex of *R* 4+5 and cell *r* 1. The surface of wing below *R* 2+3 not darkened. Frons wide in males and in females, slightly narrower than the eye. Genitalia with massive broad strongly sclerotized gonostyles. Hypoproct broad, bluntly cut (almost straight) apically, with pubescent elongated ventral lobes on anterolateral corners. *S. (Sylvicola) limpidus* (EDWARDS)
- Wing with brownish spots on the cells *r* 1 and on the apex of *R* 4+5 and with many distinct and indistinct dark and light spots. 6
- 6 Wing strongly darkened apically, with 2 isolated oval light spots, the posterior of which is removed to the apex (fig. 16). Halteres with blackish knob. Gonocoxites swollen apically, massive, almost rectangle in basal half, narrowed and slightly S-curved apically. *S. (Sylvicola) suzukii* (MATSUMURA)
- Wing without apically removed light spot under *R* 4+5. 7
- 7 Dark apical spot isolated, triangle, along costal vein as a rule no more than the distance between the spot and the apex of *R* 2+3. 8
- Dark apical spot without distinct posterior border. Together with the spot below the apex of *R* 2+3 this spot borders the light spot, situated behind *R* 2+3. Apical spot 1,5 - 2 times as long as the distance between it and the apex of *R* 2+3. Eyes of male holoptic. The distance between *M* 1 and *M* 2 is 1,5 times as long as or equal to the distance between *M* 2 and *M* 3. 10
- 8 Eyes of males holoptic, frons no wider than one facet. Gonostyles large, almost rectangle in base, with lateral narrowed projection. Apical spot of wing dark, distinct. *S. (Sylvicola) zetterstedti* (EDWARDS)
- Eyes of male dichoptic, widely separated. Gonostyles elongated. Apical spot of wing with indistinct borders. 9
- 9 Hypoproct broadly rounded, with soft pubescent apical lobes ventrally. Gonostyles massive, without lateral projection (fig. 22). *S. (Sylvicola) cinctus* (FABRICIUS)
- Hypoproct narrowed to the apex, with deep opening. Soft pubescent lobes present in the middle of hypoproct ventrally. Gonostyles with distinct lateral projection (fig. 24). *S. (Sylvicola) fenestralis* (SCOPOLI)
- 10 Light spot behind *R* 2+3 distinct, bordered with well developed dark spots. Halteres light. Apex of *R* 2+3 completely dark. Hypoproct massive, almost rectangle, gonostyles massive, trapezium like. *S. (Sylvicola) japonicus* (MATSUMURA)
- Light spot behind *R* 2+3 weakly developed, spots bordering it indistinct. Halteres of male with dark knob. Apex of *R* 2+3 light. Hypoproct somewhat narrowed apically, with an opening. Gonostyles elongated, slightly curved. *S. (Sylvicola) matsumurai* (OKADA)

Literature

- ANDERSSON, H. 1967: Notes on Swedish Diptera - *Opuscula Entomologica* 32: 121-122.
- FREEMAN, P. 1950: Family Anisopodidae (Rhyphidae). - *Handbooks identif. British insects. Royal ent. soc. Lond.* 9(2): 70-72.
- HANCOCK, E. G. 1989: Notes on the window gnats, genus *Sylvicola* (Diptera, Anisopodidae), in Scotland. - *Scottish Naturalist* 101: 3-13.
- LINDNER, E. 1930: 1a. Phryneidae (Anisopodidae, Rhyphidae). - In: E. LINDNER (ed.): *Die Fliegen der palaearktischen Region* 5: 1-10.

- OKADA, J. 1935: Ueber die Gattung *Phryne* MEIGEN (Phryneidae). (Neue und wenig bekannte Dipteren aus Japan. II.). - *Insecta matsumurana* 9(4): 166-171.
- OKADA, J. 1938: Die Phryneiden und Pachyneuriden Japans (Diptera, Nematocera). - *J. Faculty Agric. Hokkaido Imper. Univ.* 42(2): 221-238.
- PEDERSEN, V. 1968: Studies on the Danish Anisopodidae (Diptera, Nematocera). - *Entomol. Meddelelser* 36: 225-231.
- PRATT, G. K. & PRATT, H. D. 1980: Notes on nearctic *Sylvicola* (Diptera: Anisopodidae). - *Proc. entomol. soc. Wash.* 82: 86-98.
- SØLI, G. E. E. 1992: Norwegian species of *Sylvicola* HARRIS, 1776 (Diptera: Anisopodidae). - *Fauna norv. (Ser. B)* 39: 49-54.

Authors' addresses:

NINA P. KRIVOSHEINA
A. N. Severtsov Institut of
Ecology and Evolution
Russian Academy of Sciences
33 Leninsky Prospect
Moscow 117071, Russia

FRANK MENZEL
Deutsches Entomologisches Institut
Schicklerstraße 5
D-16225 Eberswalde
Germany

Besprechungen

KORMANN, K.: **Schwebfliegen Mitteleuropas: Vorkommen, Bestimmung, Beschreibung: Farbatlas mit über 100 Naturaufnahmen.** - Landsberg a. L.: Ecomed Verlagsgesellschaft, 1988. - 176 S.: 125 Farbfot. - 58,- DM

Dem Hauptteil, der Beschreibung von etwa 100 fotografisch abgebildeten Arten ist ein allgemeiner Teil (Morphologie und Lebensweise) und die Behandlung von 17 von Schwebfliegen gern besuchten Pflanzen mit Angabe der daran zu erwartenden Arten vorangestellt. Ein Bestimmungsschlüssel führt unter Beschränkung auf die im Buch berücksichtigten bis zu den Gattungen. Es folgen kurze Hinweise zum Sammeln und Fotografieren und ein Anhang, der aus einer auf der Literatur fußenden nützlichen Artenliste mit Angaben zu Flugzeit, Häufigkeit, Gefährdungsgrad und Vorkommen (Gebiete und Biome) besteht.

Der allgemeine Teil befriedigt nicht recht, woran der in Ausdruck und Orthographie enttäuschende Umgang mit der deutschen Sprache einen Anteil hat. Da es im speziellen Teil nicht eine einzige Larvenabbildung gibt, hätte man sich wenigstens hier eine solche gewünscht. Muscidenähnliche Arten soll man u.a. am Flügelgäader als Schwebfliegen erkennen können - aber ein Hinweis auf die Vena spuria fehlt. Manche Angabe geht wohl auf Gelegenheitsbeobachtungen zurück. Relativ ausführlich wird die Fliegenjagd von Hornissen behandelt, die ihre Beute nach Meinung des Verfassers an Ort und Stelle verzehrt hätten, was sie bestimmt nicht getan haben.

Die Fotos sind von befriedigender Schärfe, aber größtenteils zu dunkel. Nicht wenige möchte man geradezu als Ausschuß bezeichnen. Es sei aber nicht verkannt, welch große Mühe aufgewandt werden mußte, um eine so große Artenzahl auf den Film zu bekommen. Allen Arten wurde ein deutscher Name gegeben, auch einigen, für die in der Literatur bereits abweichende gebraucht werden. Bei manchen Arten findet man bald unter der Überschrift Biologie, bald unter Entwicklung eine knappe Angabe zur Lebensweise der Larven, in vielen Fällen fehlt ein solcher Hinweis auch dort, wo diese längst bekannt ist, z.B. bei *Eristalis tenax* (Rattenschwanzlarven!). Als Beispiel für die Verallgemeinerung von Zufallsbeobachtungen sei erwähnt, daß die Larven von *Episyrphus balteatus* als polyphag bezeichnet werden, weil sie "bei Nahrungsmangel neben Blattläusen auch Blattwespenlarven" fressen. Fazit: Das Buch ermöglicht einen Einstieg in die Beschäftigung mit Schwebfliegen, es läßt jedoch manchen Wunsch offen.

U. SEDLAG