

## New species of the *Mycetophila vittipes*-group from Russia (Diptera: Mycetophilidae)

A.I. Zaitzev

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Descriptions of *Mycetophila gentilia* sp. n. from Moscow Prov., Kostroma Prov. and Altai, *M. inquisita*, *M. unca* spp. n. from Sakhalin I. and Kuril Is., *M. morata* sp. n. from Sakhalin I. and Altai, *M. setifera* sp. n. from Altai, *M. subbrevitarsata* sp. n. from Altai, Sakhalin I., and Kuril Is. are given.

A.I. Zaitzev, Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky prosp. 33, Moscow 117071, Russia.

Examination of the Mycetophilidae material from various regions of Russia revealed six new species of the genus *Mycetophila* belonging to the *vittipes*-group. Holotypes and paratypes of the new species are deposited in the Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow. Females of all the species described in this paper are unknown.

There are 10 Palaearctic (Laštovka, 1963; Sasakawa, 1964) and 12 Nearctic (Laffoon, 1957) species of the *vittipes*-group. All of the known species have a distinct central spot and dark preapical band on the wings, a dark brown dorsal line on middle and hind femora and no anterodorsal bristles on middle and hind tibiae.

### *Mycetophila gentilia* sp. n.

(Figs 1, 4)

*Holotype*. ♂, **Russia**, *Moscow Prov.*, Krasnaya Pakhra, 26.V.1988, Zaitzev leg.

*Paratypes*. **Russia**, 1 ♂, *Kostroma Prov.*, Ugory, 8.IX.1981, Zaitzev leg.; 2 ♂, *Altai Terr.*, Altai Mts., Teletskoe Lake, Artybash, 10.VI and 12.VII.1981, Zaitzev leg.

*Description*. Male. Head dark brown or black; palpi and mouth parts brown; antennae dark brown; sixth flagellomere about 1.5 times as long as wide. Thorax black; mesonotum pruinose; propleura with 3 long bristles. Wing 2.8 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>, proximal part extending back to *M*<sub>1</sub>;

*R* with 3-4 setulae below; *R*<sub>1</sub> with 18 setulae below; *M* before *rm* with 9-10 setulae below; ratio of *rm* : *M* petiole 1.3-1.5. Legs mostly yellow; hind femur with apical brown band; middle tibia with 3 *a*, 4-5 *d*, 3-4 *p*, 1-2 *v*, first two rows of anterior setulae dark brown; hind tibia with 6 *a*, 5-6 *d*, 3 *p*, anterior and ventral setulae dark brown. Abdomen dark brown or black; apical bristles of abdominal sternites not much longer than the others. Genitalia brown.

*Comparison*. According to the key by Laštovka (1963), this species runs to *M. abiecta* (Lašt.), but differs distinctly in chaetotaxy of dorsal lobe of gonostylus.

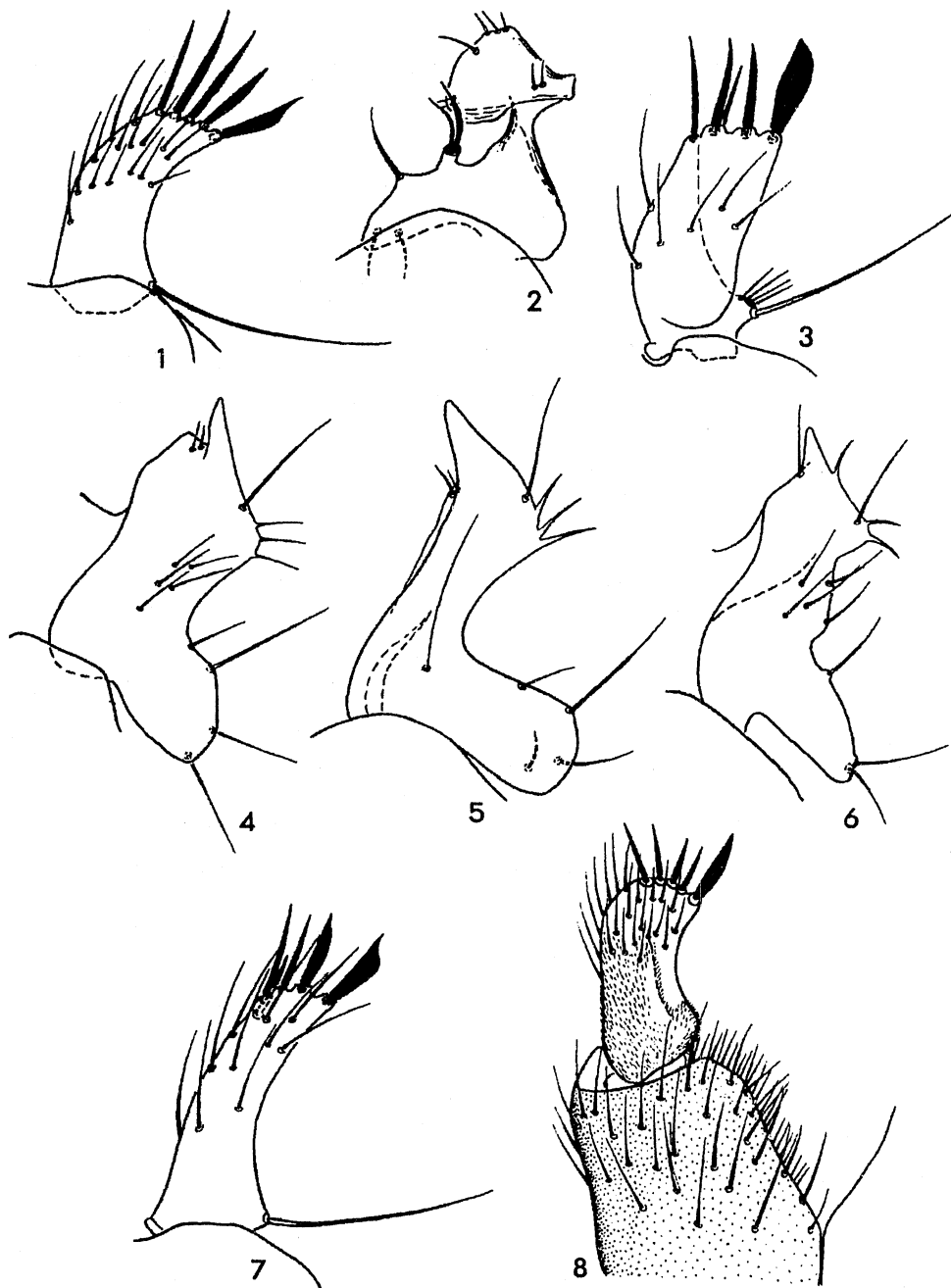
### *Mycetophila inquisita* sp. n.

(Figs 6, 7)

*Holotype*. ♂, **Russia**, *Sakhalin I.*, Kuznetsov Cape, 31.VIII.1986, Zaitzev leg.

*Paratypes*. **Russia**: 1 ♂, *Kuril Is.*, Kunashir I., 10.VIII.1977, Zaitzev leg.; 1 ♂, *Sakhalin I.*, Nayba Riv., 7 km upstream of Bykov, 13.VIII.1991, Blagoderov leg.

*Description*. Male. Head black, palpi and mouth parts yellow; antennae dark brown; scape, pedicel and basal part of 1st flagellomere yellow; sixth flagellar segment about 1.3 times as long as wide. Thorax black or dark brown; mesonotum pruinose; propleura with 3 long bristles. Wing 3 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>, proximal part extending back to *M*<sub>1</sub>; *R* with 2-3 setulae below; *R*<sub>1</sub>



**Figs 1-8.** *Mycetophila*. 1, 4, *M. gentilicia* sp. n.; 2, 8, *M. morata* sp. n.; 3, 5, *M. setifera* sp. n.; 6, 7, *M. inquisita* sp. n. 1, 3, 7, ventral lobe of gonostylus; 2, 4-6, dorsal lobe of gonostylus; 8, male genitalia (ventral view).

with 15-17 setulae below; *M* before *rm* with 4-6 setulae below; ratio of *rm* : *M* petiole 1-1.5. Legs mostly yellow; hind femur with dark apical brown band; middle tibia with 3

*a*, 5 *d*, 3 *p*, 2 *v*, first two rows of anterior setulae dark brown; hind tibia with 5 *a*, 5 *d*, 3 *p*, anterior and ventral setulae dark brown. Abdomen dark brown or black; apical bris-

tles of abdominal sternites not much longer than the others. Genitalia brown.

*Comparison.* *M. inquisita* is close to *M. abiecta* (Lašt.) from which it can be easily separated by the arrangement of dark apical spines on the ventral lobe of gonostylus and by ventral lobe of gonostylus bearing only 1 bristle near apical appendage.

### ***Mycetophila morata* sp. n.**

(Figs 2, 8)

*Holotype.* ♂, **Russia**, *Sakhalin I.*, Seym Creek, Nayba Riv., 19.VIII.1991, Blagoderov leg.

*Paratype.* ♂, **Russia**, *Altai Terr.*, Altai Mts., Teletskoe Lake, Artybash, 10.VI.1981, Zaitzev leg.

*Description.* Male. Head dark brown; palpi and mouth parts yellow. Antennae dark brown; scape, pedicel and basal part of 1st flagellomere yellow; sixth flagellar segment about 1.5 times as long as wide. Thorax dark brown; mesonotum pruinose, dark brown with small yellow humeral spots; propleura with 3 long bristles. Wing 3-3.2 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>; proximal part extending back to *M*<sub>1</sub>; *R* with 7 setulae below; *R*<sub>1</sub> with 20 setulae below; *M* before *rm* with 8 setulae below and 5 setulae above; ratio of *rm* : *M* petiole 1.7. Legs mostly yellow; hind femur with a distinct brown dorsal line from base to apex and brown band at apex; middle tibia with 3 *a*, 5 *d*, 4 *p*, 3 *v*, first two rows of anterior setulae dark brown; hind tibia with 6 *a*, 5 *d*, 1 *p*, anterior and ventral setulae dark brown. Abdomen dark brown; apical bristles of abdominal sternites not much longer than the other. Genitalia brown.

*Comparison.* *M. morata* differs from other species of the *vittipes*-group in the very characteristic structure of the dorsal lobe of gonostylus.

### ***Mycetophila setifera* sp. n.**

(Figs 3, 5)

*Holotype.* ♂, **Russia**, *Altai Terr.*, Altai Mts., Teletskoe Lake, Artybash, 1-10.V.1982, Zaitzev leg.

*Paratypes.* 27 ♂, same locality as holotype, 31.V, 2.VI, 12.VII.1981, 1-27.V.1982, Zaitzev leg.

*Description.* Male. Head dark brown; palpi and mouth parts yellow; antennae brown; sixth flagellar segment about 1.5 times as long as wide. Thorax pruinose, dark brown; propleura with 3 long bristles. Wing 3-3.2 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before

tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>; proximal part extending back to *M*<sub>1</sub>; *R* with 8-10 setulae below; *R*<sub>1</sub> with 18-20 setulae below; *M* before *rm* with 7-10 setulae below, ratio of *rm* : *M* petiole 1-1.5. Legs mostly yellow; hind femur with apical brown band; middle tibia with 3 *a*, 5 *d*, 3 *p*, 3 *v*, first two rows of anterior setulae dark brown; hind tibia with 6-7 *a*, 5-6 *d*, 2-3 *p*, anterior and ventral setulae dark brown. Abdomen dark brown; apical bristles of abdominal sternites not much longer than the others. Genitalia brown.

*Comparison.* The new species is closely related to *M. abiecta* (Lašt.) which have also a long apical appendage on the dorsal lobe of gonostylus. It differs in the presence of only 1 long bristle near basal part of dorsal lobe of gonostylus.

### ***Mycetophila subbrevitarsata* sp. n.**

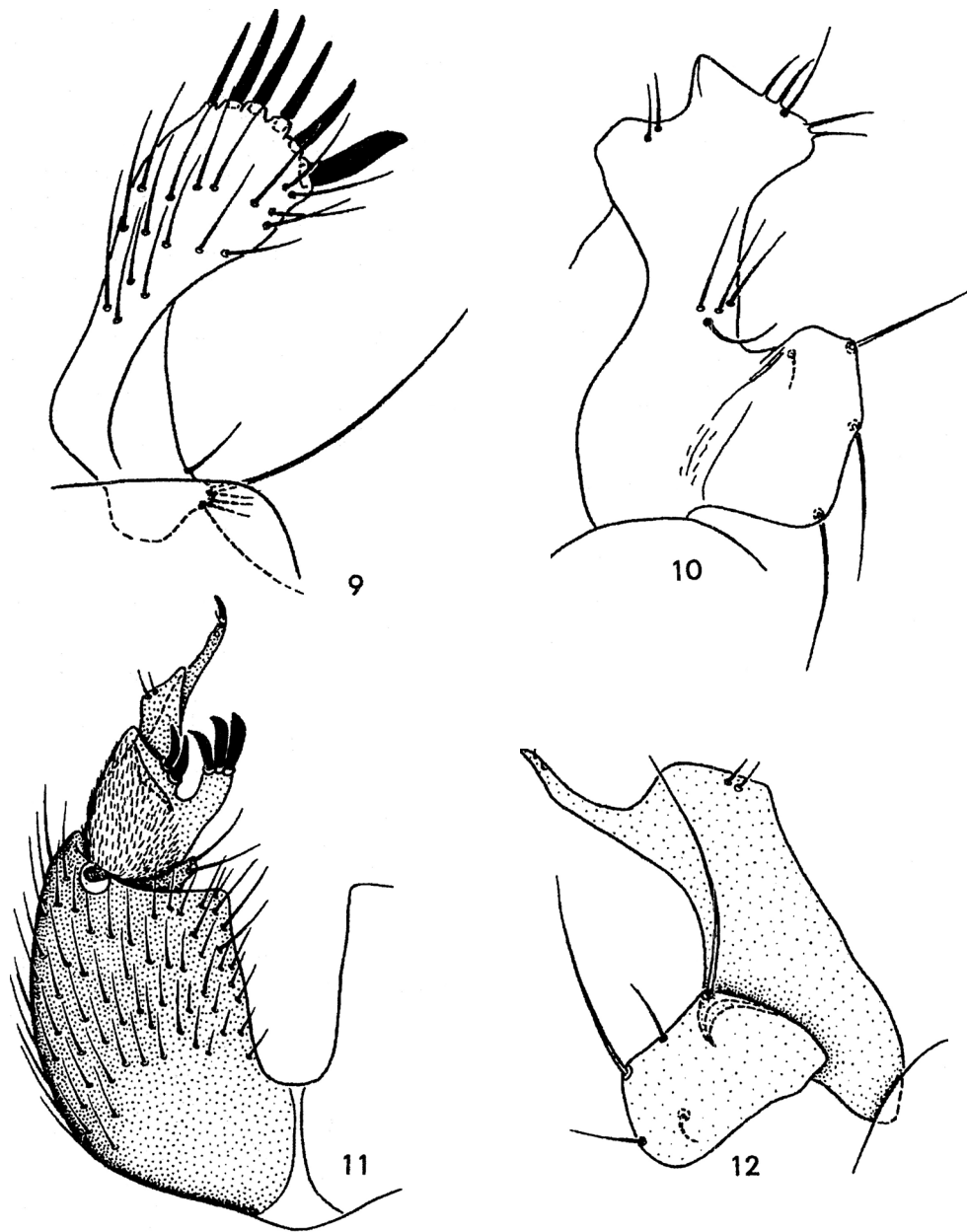
(Figs 9, 10)

*Holotype.* ♂, **Russia**, *Sakhalin I.*, Kuznetsov Cape, 21.IX.1986, Zaitzev leg.

*Paratypes.* **Russia:** *Sakhalin I.*: 2 ♂, same data as holotype; 1 ♂, Nayba Riv., 7 km upperstream of Bykov, 13.VII.1991, Blagoderov leg.; *Kuril Is.*: 4 ♂, Kunashir I., 5.VII and 10.VIII.1977, Zaitzev leg.; *Altai Terr.*: 8 ♂, Altai Mts., Teletskoe Lake, Artybash, 2-10.VI and 2-12.VII.1981, Zaitzev leg.

*Description.* Male. Head black; clypeus brown; palpi and mouth parts yellow. Antennae brown; scape, pedicel and basal parts of 1st flagellomere yellow; sixth flagellar segment about 1.5-1.7 times as long as wide. Thorax dark brown or black; mesonotum pruinose; propleura with two long bristles. Wing 3-4 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>, proximal part extending back almost to *M*<sub>1</sub>; *R* with 3-7 setulae below; *R*<sub>1</sub> with 25-26 setulae below; *M* before *rm* with 10 setulae below and 8-10 setulae above; ratio of *rm* : *M* petiole 1-2. Legs mostly yellow; hind femur with apical brown band; middle tibia with 3 *a*, 5 *d*, 3 *p*, 2 *v*, first two rows of anterior setulae dark brown; hind tibia with 7-8 *a*, 5 *d*, 4-5 *p*, anterior and ventral setulae dark brown. Abdomen dark brown or black; apical bristles of abdominal sternites not much longer than the others. Genitalia brown.

*Comparison.* This species is close to *M. brevitarsata* (Lašt.) from which it differs in the shape of the dorsal lobe of gonostylus and in the arrangement and shape of apical spines of the ventral lobe of gonostylus.



**Figs 9-12.** *Mycetophila*. 9, 10, *M. subbrevitarsata* sp. n.; 11, 12, *M. unca* sp. n. 9, ventral lobe of gonostylus, 10, 12, dorsal lobe of gonostylus; 11, male genitalia (ventral view).

***Mycetophila unca* sp. n.**  
(Figs 11, 12)

*Holotype*. ♂, **Russia**, *Sakhalin I.*, Kuznetsov Cape, 19.IX.1986, Zaitzev leg.

*Paratype*. ♂, **Russia**, *Kuril Is.*, Kunashir I., 1.V. 1977, Zaitzev leg.

*Description*. Male. Head dark brown; palpi and mouth parts yellow; antennae brown; scapus, pedicel and basal part of 1st flagellomere yellow; sixth flagellar segment about 1.2 times as long as wide. Thorax dark brown; mesonotum pruinose, dark brown with small yellow humeral spots; propleura

with two long bristles. Wing 2.9 mm long, with a distinct central spot; preapical spot starting at *C* somewhat before tip of *R*<sub>1</sub>, filling apex of cell *r*<sub>1</sub>, proximal part extending back to *M*<sub>1</sub>; *R* with 1-2 setulae below; *R*<sub>1</sub> with 18-20 setulae below; ratio of *rm* : *M* petiole 1-1.2. Legs mostly yellow; hind femur with apical brown band; middle tibia with 3 *a*, 5 *d*, 3 *p*, 2 *v*, first two rows of anterior setulae dark brown; hind tibia with 6 *a*, 5 *d*, 3 *p*, anterior and ventral setulae dark brown. Abdomen dark brown; apical bristles of abdominal sternites not much longer than the others. Genitalia brown.

*Comparison.* *M. unca* is similar to the Nearctic *M. capreolata* (Laff.) from which it differs in the shape of the dorsal and ventral lobes of the gonostylus.

#### Acknowledgements

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#### References

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