

## New species of the genus *Tachydromia* Meigen (Diptera: Hybotidae) from the Palaearctic Region: 2. *connexa*-group

IGOR V. SHAMSHEV

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Four new species of the genus *Tachydromia* of *connexa*-group — *T. borzhomica* (Georgia), *T. gussakovskii* (Tadzhikistan), *T. varxobica* (Tadzhikistan) and *T. vladimiri* (Mongolia) — are described.

I. V. Shamshev, All-Russian Institute of Plant Protection, Podbelskogo 3, Pushkin, St. Petersburg 189620, Russia.

**Key Words:** Diptera, Hybotidae, *Tachydromia*, *connexa*-group, new species, taxonomy.

### Introduction

In this paper the description of new species of *Tachydromia* from the Palaearctic Region is continued. The type specimens are deposited in the Zoological Institute (the ZIN), St. Petersburg and in the Zoological Museum of the Moscow State University (the ZMMU).

### *Tachydromia borzhomica* sp. n. (Figs 1—5)

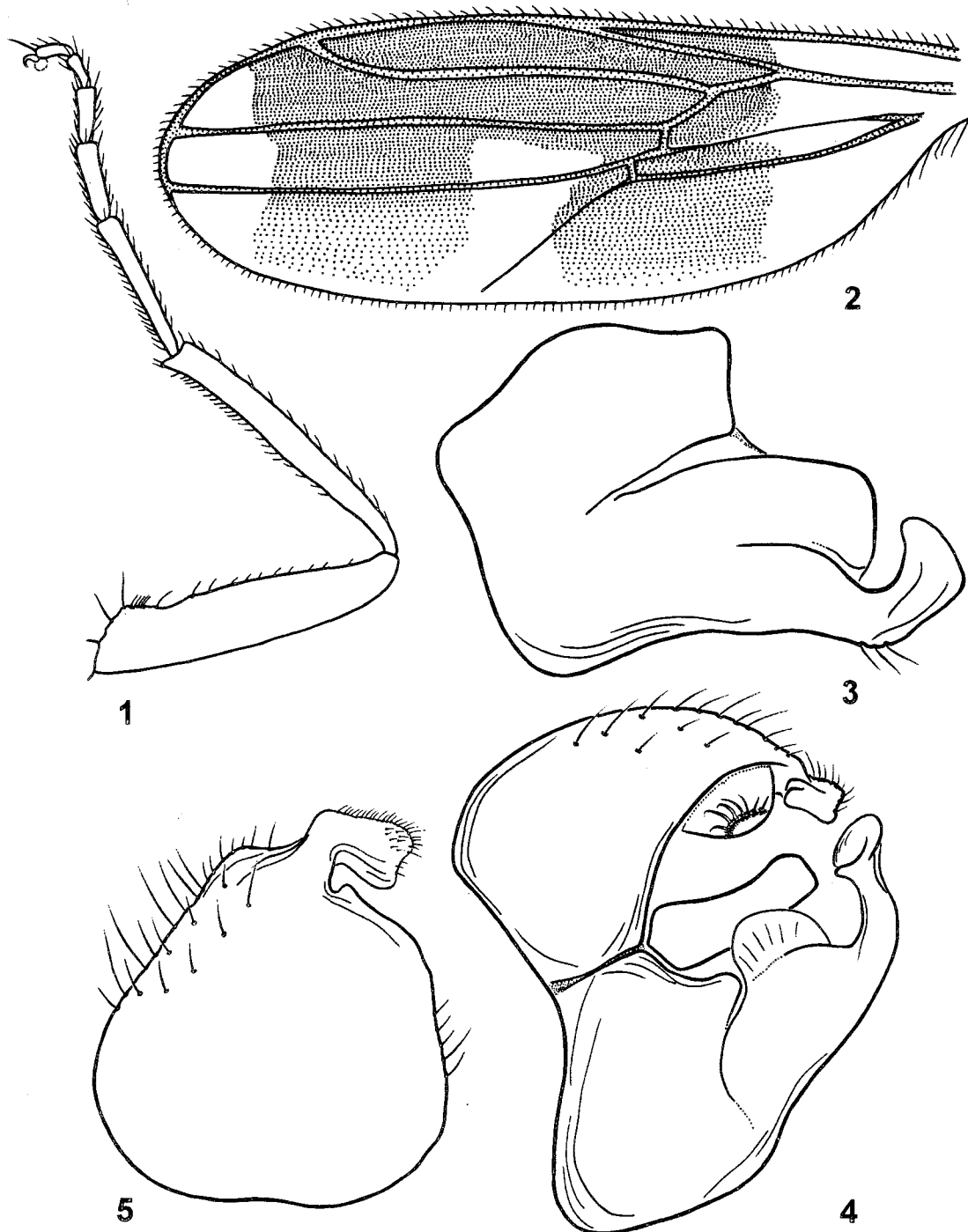
**Holotype.** ♂, West Georgia, Borzhomi Nature Reserve, on Alnus, near creek, 5.VIII. (leg. V. Kovalev) — in the ZMMU.

**Paratypes.** 2 ♀, West Georgia, Borzhomi Nature Reserve, ravine Likanskoe, on Alnus, near creek, 5.VIII.1969 (V. Kovalev).

**Description.** Male. Frons shining black, widening towards vertex. Vertex and occiput covered with greyish dust. Ocellar and postvertical bristles black, the latter is longer and widely separated. Occiput with a few black short bristles around neck and with a few long whitish hairs at lower part. Basal antennal segments yellow; 3rd segment brownish, globular, with brown supraapical arista. Ratio of length and

width of 3rd antennal segment and length of arista — 0.5:0.4:3.0. Palpi dark brown, slightly shorter than proboscis, covered with sparse brownish hairs and with a black terminal bristle which is slightly shorter than palpi. Proboscis dark brown.

Thorax shining black; prosternum, prothoracic episternum and metathorax just above hind coxae greyish silvery dusted; scutellum and metanotum dulled. One long black and 1 short notopleural and 1 postalar bristles. Dorsocentrals pale and very minute, uniserial; acrostichals absent. Two pairs of scutellar bristles, the inner pair is longer. Coxae yellow, middle and hind coxae brownish at extreme base. Fore and middle femora yellow, with brownish streak above; hind femora brownish with the exception of basal third. Knees yellow. All tibiae and tarsi brownish to dark brown. Coxae yellowish to yellowish brown haired. Fore femora and tibiae stout. Fore femora with an anteroventral row of short dark bristles becoming longer and paler towards base. Fore tibiae and tarsi short haired only. Middle femora with shallow excision in one third beneath, posteriorly with small tubercle covered with a few short black spines and with two long black straight spines; anterior margin of exci-



Figs 1—5. *Tachydromia borzhomica* sp. n., male.

1, middle leg; 2, wing; 3—5, genitalia: 3, right periandrial lamella, 4, periandrium and cerci, 5, left periandrial lamella.

sion with a very short straight black spine; from the excision towards tip there is a double row of short black bristles. Middle tibiae only short haired and with shovel-like apical projection beneath. Hind legs slender and short haired. Wings with round tip. Wing pattern consists of brown bands broadly connected along costa, rather broad hyaline mid-stripe reaches upwards only to cubital vein, no hyaline area in submarginal cell. Dark bands brown tinge along costal margin to cubital vein but only very faint and more greyish below. Mid-stripe, base and apex of wing hyaline, indistinctly milky-white, veins being whitish here, otherwise dark brown.  $R_{2+3}$  straight.  $R_{4+5}$  and  $M$  parallel near apex. Halteres whitish yellow, stem darker.

Abdominal tergites faintly greyish dusted, sternites shining brown and covered with short brownish hairs, only last two sternites with long dark hairs at hind margin. Genitalia (Figs 3—5) large and globular.

Length: body 1.9 mm; wing 2.2 mm.

Female. Differing from male by follows: middle femora with a double row of rather long black bristles along the whole length beneath, without any excavation and with two long brownish hairs at base; no apical projection at middle tibiae; abdomen shining brownish.

Length: body 2.3—2.4 mm; wing 2.1—2.2 mm.

*Distribution.* West Georgia.

*Diagnosis.* Closely resembling *T. costalis* (v. Ros.) and *T. elbrusensis* Chvála. The latter has legs somewhat darker, especially in female, hind femora all black, fore femora with the fine yellowish anteroventral hairs and abdominal tergites densely silvery grey dusted. *T. costalis* (v. Ros.) differs from the new species by shining dark brown vertex, extensively brown, leaving only tips yellowish, femora and some other characters.

***Tachydromia gussakovskii* sp. n.**  
(Figs 6—10)

*Holotype.* ♂, Tadzhikistan, Stalinabad (now Dushanbe), 7.V.1945 (leg. Gussakovskiy) — in the ZIN.

*Paratypes.* ♀, the same locality, 30.IV.1942; 4♂, the same locality, 24.IV.1942; ♂, the same locality, 4.V.1945.

*Description.* Male. Frons, vertex and occiput shining dark brown, the latter with only faint and hardly visible greyish dust above neck. Frons

widening towards vertex. Ocellar and postvertical bristles black, the latter is longer and widely separated. Occiput with short black bristles behind postverticals and around neck and with a few long whitish hairs at lower part. Basal antennal segments yellow; 3rd segment brownish, globular, with brown supraapical arista. Ratio of length and width of 3rd antennal segment and length of arista — 0.5:0.4:2.2. Palpi brownish, slightly shorter than proboscis, covered with short yellow hairs and with black terminal bristle which is as long as palpi. Proboscis dark brown.

Thorax shining black. Prosternum, prothoracic episternum and metathorax just above hind coxae greyish silvery dusted; scutellum and metanotum dulled. Two-three very minute pale humeral bristles and a few very minute pale hairs behind humeri, 1 long and 1 short notopleural and 1 postalar bristles. Dorsocentrals pale and very minute, uniserial; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Fore coxae yellow, middle and hind coxae brownish at base. All femora largely dark brown; fore and middle femora yellow at basal half and at tip; hind femora yellow at basal third. All knees yellow. Tibiae dark brown, at extreme base yellow only. Last three segments of tarsi brownish. Coxae whitish haired. Fore femora and tibiae distinctly stout. Fore femora with two rows of pale bristle-like hairs becoming longer towards base. Middle femora with shallow excision at basal half beneath, posteriorly with 4—5 black spine-like bristles; anteroventral row anteriorly excision consists of 6 black spine-like bristles becoming shorter towards tip. Middle tibiae with a row of black short bristles beneath and with short apical projection. Hind legs slender and short haired only. Wings with round tip, brownish along costal margin.  $R_{2+3}$  straight.  $R_{4+5}$  and  $M$  parallel near apex. Veins brownish. Halteres whitish yellow.

Abdomen shining dark brown, short black haired above; last two sternites with black long hairs on hind margin.

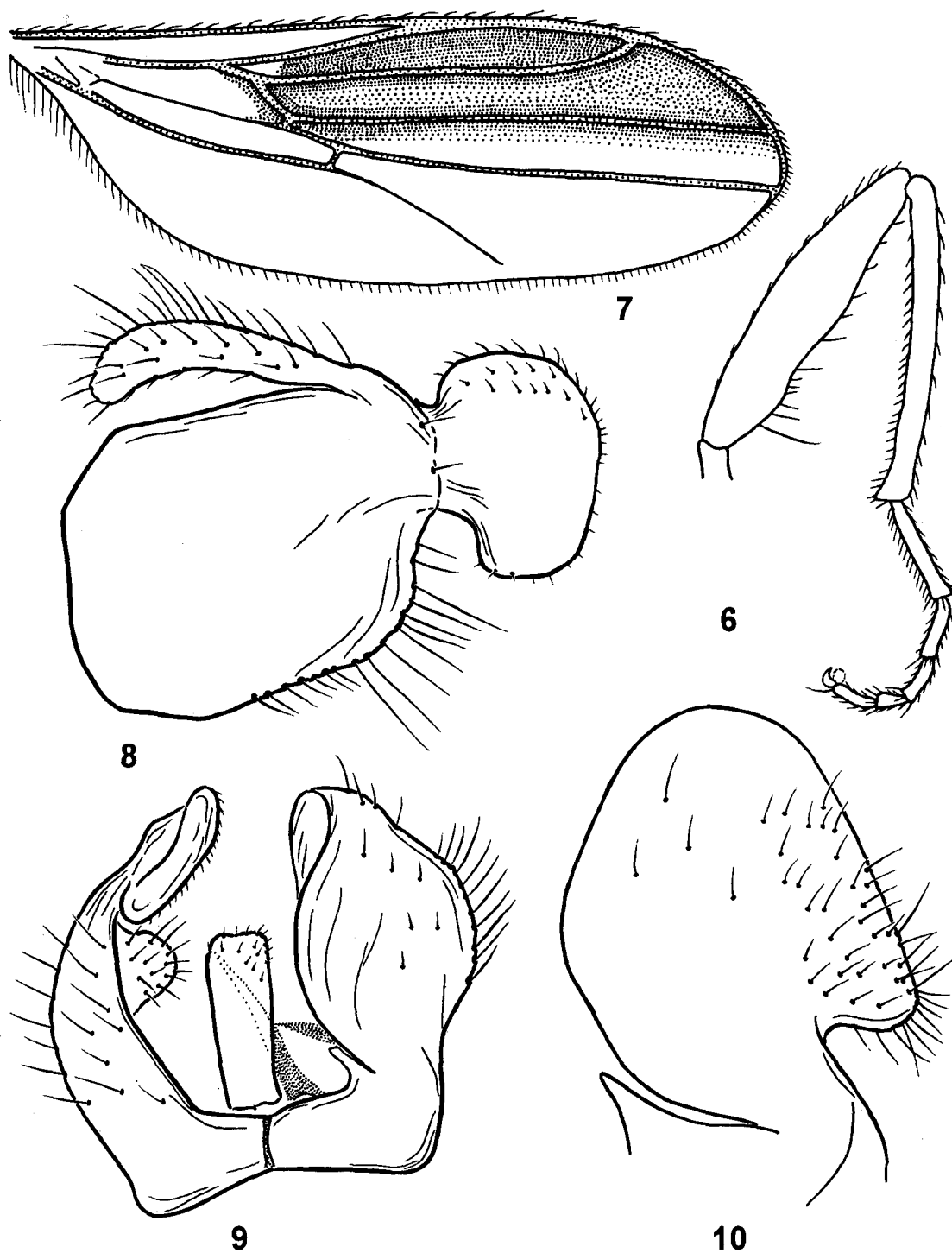
Genitalia, see Figs 8—10.

Length: body 1.7—1.9 mm; wing 1.9—2.0 mm.

Female. Closely resembling male but middle femora without excision beneath, with 2 rows of dark brown short bristles; middle tibiae without projection at tip.

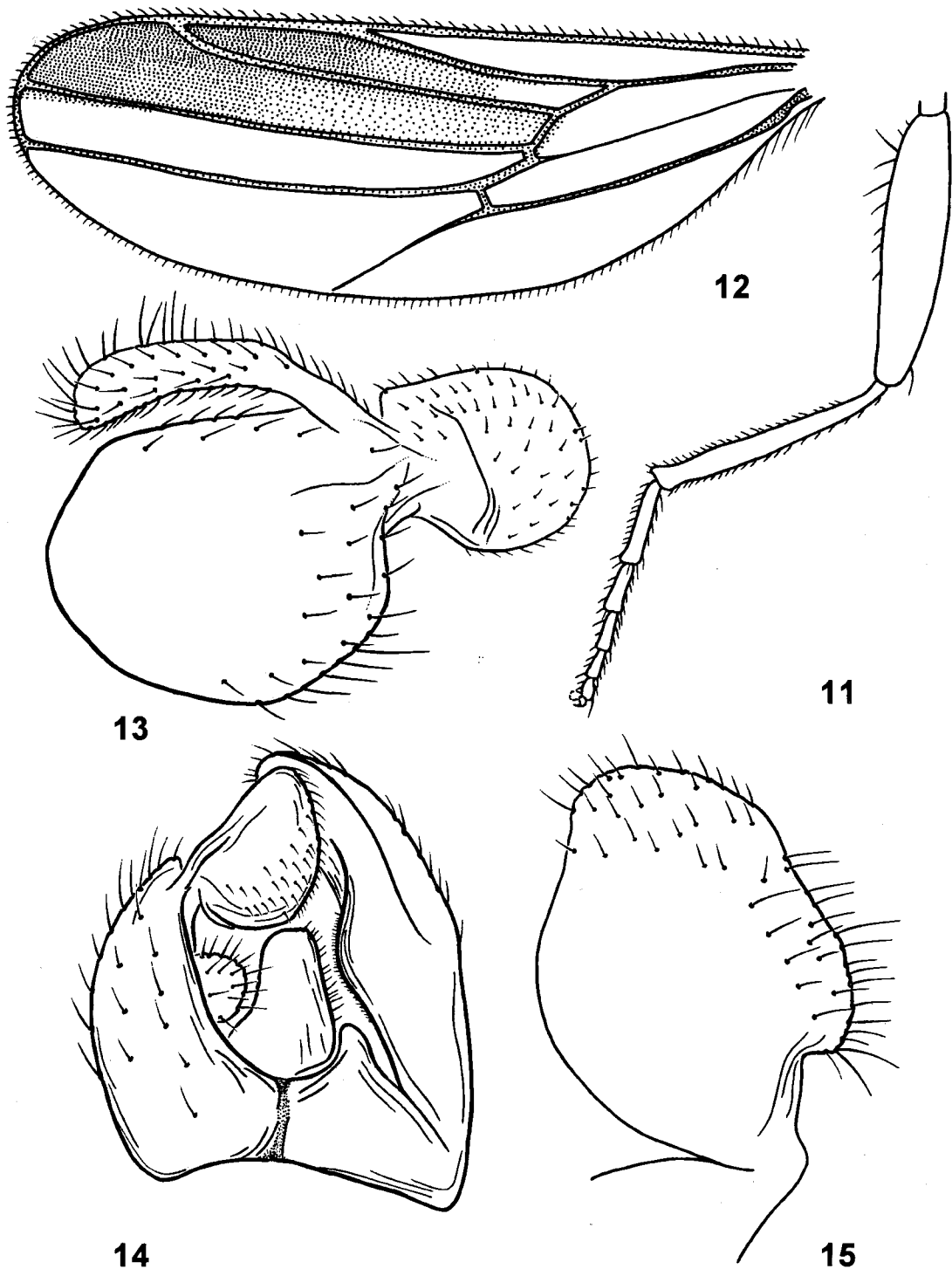
Length: body 2.1 mm; wing 2.1 mm.

*Distribution.* Tadzhikistan.



Figs 6—10. *Tachydromia gussakovskii* sp. n., male.

6, middle leg; 7, wing; 8—10, genitalia: 8, right periandrial lamella; 9, perianthrium and cerci; 10, left periandrial lamella.



Figs 11—15. *Tachydromia varxobica* sp. n., male.  
11, middle leg; 12, wing; 13—15, genitalia: 13, right periandrial lamella, 14, perandrium and cerci, 15, left periandrial lamella.

**Diagnosis.** This species may be distinguished from other species of the *connexa*-group by the coloration of legs, structure of middle femora and wing pattern.

***Tachydromia varzobica* sp. n.**

(Figs 11—15)

**Holotype.** ♂, **Tadzhikistan**, canyon Kondara, valley of Varzob river, 1100 m, 21.VIII.1945 (leg. Gussakovskiy) — in the ZIN.

**Paratype.** ♀, the same locality, 15.VII.1937.

**Description.** Male. Frons, vertex and occiput shining, dark brown, the latter with only faint and hardly visible greyish dust above neck. Frons widening towards vertex. Ocellar and postvertical bristles black, the latter is longer and widely separated. Occiput with short black bristles behind postverticals and around neck and with a few long whitish hairs at lower part. Basal antennal segments yellow; 3rd segment brownish, globular, with brown supraapical arista. Ratio of length and width of 3rd antennal segment and length of arista — 0.5:0.4:2.1. Palpi brownish, slightly shorter than proboscis, covered with short yellow hairs and with black terminal bristle which is as long as palpi. Proboscis dark brown.

Thorax shining black. Prosternum, prothoracic episternum and metathorax just above hind coxae greyish silvery dusted; scutellum and metanotum dulled. Two-three very minute pale humeral bristles and a few very minute pale hairs behind humeri, 1 long and 1 short notopleural and 1 postalar bristles. Dorsocentrals pale and very minute, uniserial; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Legs largely brown; fore coxae, middle and hind coxae at tip yellow. Fore and middle femora yellow, with brownish strip above; hind femora at basal and apical quarter yellow. Knees and all tibiae at extreme base yellow; first segment of fore tarsi brownish at tip only, 2nd and 3rd segments of the same tarsi all yellow. Coxae whitish haired. Fore femora and tibiae distinctly stout. Fore femora with two rows of short bristles beneath: the anteroventral one is brownish and equal in length along the whole femora, the posteroventral one is pale and becoming longer towards base. Middle femora with very shallow excision and with 4—5 black spine-like bristles at base. Middle tibiae with a row of

black short bristles beneath and with a short apical projection. Hind legs slender and short haired only. Wings with round tip, brownish along costal margin, as in *gussakovskii* sp. n..  $R_{2+3}$  straight.  $R_{4+5}$  and  $M$  parallel near apex. Veins brownish. Halteres whitish yellow.

Abdomen shining dark brown, short black haired above; last two sternites with black long hairs on hind margin.

Genitalia, see Figs 13—15.

Length: body 1.6 mm; wing 1.7 mm.

**Female.** Closely resembling male but middle femora without excision beneath, with 2 rows of dark brown short bristles; middle tibiae without projection at tip.

Length: body 1.8 mm; wing 1.9 mm.

**Distribution.** Tadzhikistan.

**Diagnosis.** Very similar to *T. gussakovskii* sp. n., distinguished from it by coloration of legs (especially hind femora), by structure of middle femora and by male terminalia.

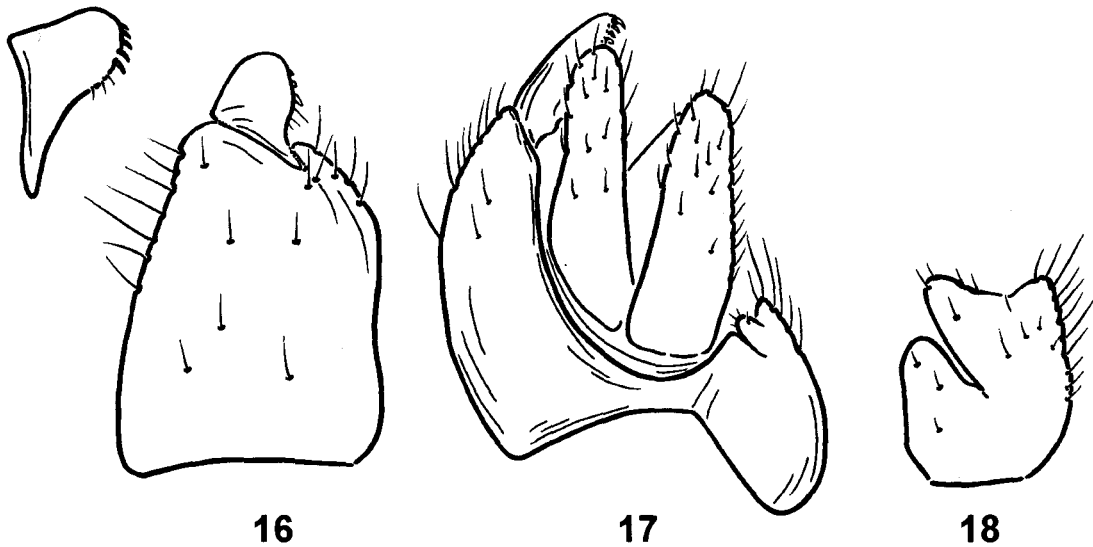
***Tachydromia vladimiri* sp. n.**

(Figs 16—18)

**Holotype.** ♂, **Mongolia**, Ulyastayn-Gol River, 12 km SW of Bulgan, 19.VI.1980 (leg. Kerzhner) — in the ZIN.

**Description.** Male. Frons with shining black spot at the middle only, slightly widening towards vertex. Vertex and occiput covered with greyish dust, the latter shining black above mouth-opening. Ocellar and postvertical bristles black and very short, nearly equal in length. Occiput with a few short black bristles behind postverticals right to eye-margin, with two pairs of longer black bristles above neck and with numerous short dark hairs at lower part. Arista and 3rd antennal segment are missing, basal antennal segments yellowish brown. Palpi dark brown, slightly shorter than proboscis, covered with short adpressed silvery hairs and with a short black terminal bristle. Proboscis dark brown.

Thorax shining black. Prosternum, prothoracic episternum, mesothorax just above middle coxae and metathorax just above hind coxae greyish silvery dusted; sides of mesonotum, scutellum and metanotum dulled. Notopleural bristles (?), one black short postalar bristles. Acrostichals absent, dorsocentrals uniserial, yellowish and minute, only last pair in front of



Figs 16—18. *Tachydromia vladimiri* sp. n., male.

16—18, genitalia: 16, right periandrial lamella, 17, periandrium and cerci, 18, left periandrial lamella.

scutellum black and strong. Scutellum with 3 pairs of bristles, the inner pair is longer. Legs dark brown, fore coxae at extreme tip and first segment of middle and hind tarsi yellow. All legs, including coxae, clothed with silvery pubescence. Coxae yellowish white haired. Fore femora and tibiae stout. Fore femora with a row of very short whitish hairs beneath. Fore tibiae and tarsi short haired only. Middle femora with a double row of short black bristles. Middle tibiae only short haired and with apical projection at tip. Hind legs long and slender and only short haired. Wings with very slightly tapering apex. The brown bands are broadly connected along costa, leaving only basal fourth of wing and extreme apex somewhat milky-white, the hyaline mid-stripe reaches upwards only to middle of first posterior cell.  $R_{2+3}$  very slightly arched

towards costa at middle, ending nearly straight.  $R_{4+5}$  and  $M$  convergent near apex. Halteres whitish yellow, stem darker.

Abdomen shining blackish brown, last sternites at hind margin with short brown hairs. Genitalia (Figs 16—18) small and narrow.

Length: body 2.4 mm; wing 2.2 mm.

Female unknown.

*Distribution.* Mongolia.

*Etymology.* This new species is named after Vladimir V. Zlobin, St. Petersburg.

*Diagnosis.* This species shows some affinity to the *interrupta*-group of *Tachydromia*. But it can be easily distinguished from all species of this group by wing pattern. Among the species of *connexa*-group new species is the only one with three pair of scutellar bristles.

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