#### New species of the genus *Tachydromia* Meigen (Diptera: Hybotidae) from Palaearctic Region: 3. *ornatipes*-group.

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Four new species of the genus *Tachydromia* of *ornatipes*-group — *T. kerzhneri* (Russian Far East), *T. ozerovi* (Amur Prov.), *T. stanislavi* (Tuva Prov., Indigirka Distr.) and *T. tuvinica* (Tuva Prov., Mongolia) — are described.

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Key Words: Diptera, Hybotidae, Tachydromia, ornatipes-group, new species, Palaearctic Region.

#### Introduction

Four new species of the genus Tachydromia of ornatipes-group — T. kerzhneri (Russian Far East), T. ozerovi (Amur Prov.), T. stanislavi (Tuva Prov., Indigirka Distr.) and T. tuvinica (Tuva Prov., Mongolia) — are described below, and a key to for identification of Palaearctic species of ornatipes-group are given. The type specimens of the new species are deposited in the Zoological Institute (the ZIN), St.Petersburg and in the Zoological Museum of the Moscow State University (the ZMMU).

## A key to for identification of Palaearctic species of ornatipes-group

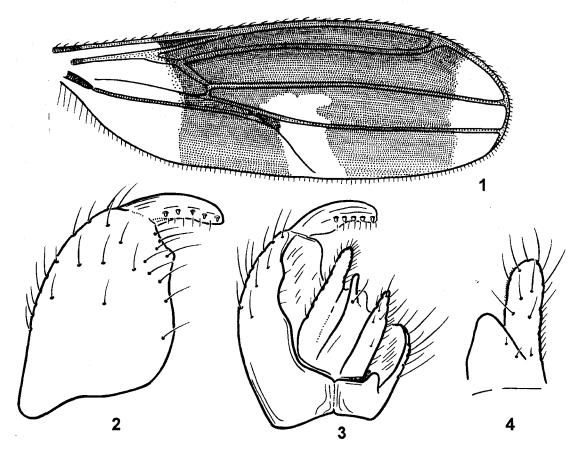
- 1(2) Male: Apical third of wing undeveloped and milky-white, a large preapical spur at middle tibiae beneath, middle legs with long hairs. Female: Brown bands on wing faint, outer band narrower, wings not milky-white, crossveins widely separated. Fore coxae and anterior four femora yellowish beneath (Alps) ...... ..... ornatipes (Beck.)
- 2(3) All dorsocentrals only pale and very minute. Anterior four femora only short haired, no

apical projection at middle tibiae in male. Wings hyaline, with only narrowly separated faint brownish bands (England)

- Last pair of dorsocentrals in front of scutellum is long and dark. Anterior four femora with long pale and dark hairs beneath and with
- are more distinct near costal margin . . . . 4

- Vertex densely covered with silvery gray dust.
  Middle femora a with double row of long black bristles beneath . . . . . . . *kerzhneri* sp. n.
- Wings very faint brownish at costal margin only
- 6(5) Ocellar and postvertical bristles approximately equal in length. Arista 4.3 times longer than

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Figs 1-4. Tachydromia kerzhneri sp. n., male. 1, wing; 2-4, genitalia: 2, right periandrial lamella, 3, periandrium and cerci, 4, left periandrial lamella.

### *Tachydromia kershneri* sp. n. (Figs 1—4)

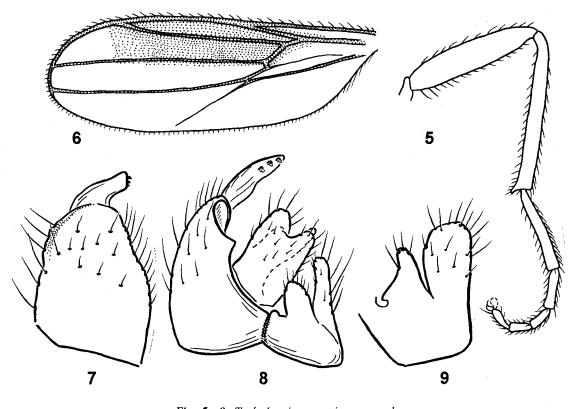
Holotype. J, Russia, Primorsk Terr., "Kedrovaya Pad' "Nature Reserve, 29.VI.1982 (leg. Kerzhner). Paratypes. Q, the same locality, 6.VII.1982; Q, the same locality, 1.VII.1982.

Description. Male. Frons shining black brown, slightly widening towards vertex. Vertex and occiput densely covered with silvery gray dust. Ocel-

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lar and postvertical bristles black, nearly equal in length. Occiput with five short black bristle-like hairs behind postverticals, with four short black bristle-like hairs just above neck and with a few longer whitish hairs just behind mouth-opening. Antennae brownish yellow; 3rd segment darker, globular, with brown supraapical arista. Ratio of length and width of 3rd antennal segment and length of arista — 0.5:0.4:3.3. Palpi brownish yellow to yellow, slightly shorter than proboscis, covered with long silvery hairs and with a black terminal bristle which is 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 notopleural and one postalar bristles. Dorsocentrals uniserial, brownish and very minute, only last pair in front of scutellum is long and black; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Legs



Figs 5—9. *Tachydromia ozerovi* sp. n., male. 5, middle leg; 6, wing; 7—9, genitalia: 7, right periandrial lamella, 8, periandrium and cerci, 9, left periandrial lamella.

predominantly brown; all coxae, fore and middle femora, all knees and tibiae at base brownish yellow; first segments of all tarsi yellow. Coxae whitish haired and silvery gray dusted. Fore femora and tibiae distinctly stout. Fore femora with a double row of short pale hairs beneath. Fore tibiae only short haired. Middle femora with a double row of rather long black bristles beneath. Middle tibiae with very short black bristle-like hairs beneath and very short but sharp apical projection. Hind legs long and slender, only short haired. Wings with round tip; wing pattern consists of two brown bands broadly connected along costa.  $R_{2+3}$  slightly arched at the middle.  $R_{4+5}$  and M parallel near apex. Veins brownish. Halteres whitish yellow, stem darker.

Abdomen shining dark brown, covered with only scattered brownish hairs, especially on last segments. Genitalia (Figs 2—4) small and somewhat conical. Length: body 1.7 mm; wing 1.8 mm.

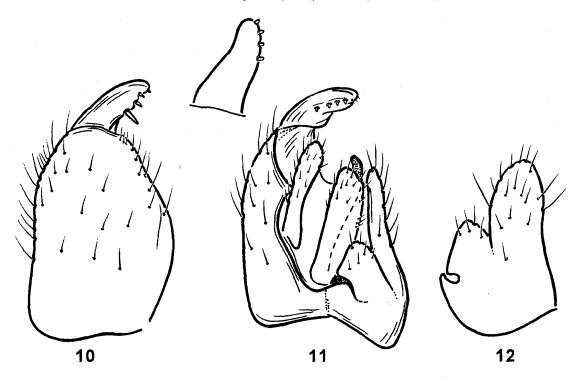
Female. Very closely resembling male but middle tibiae without apical projection at tip beneath. Length: body 1.9-2.1 mm; wing 2.0-2.1 mm. *Distribution*. Russian Far East. Diagnosis. This species most resembles T. paroa Chvála, the distinctive characters are given in the identification key.

## *Tachydromia ozerovi* sp. n. (Figs 5—9)

Holotype. J, Russia, Amur Prov., Zeya Distr., 5. VII.1982 (leg. A. Ozerov) — in the ZMMU.

Description. Male. Frons shining black, slightly widening towards vertex. Vertex shining black. Occiput on the upper part densely covered with silvery gray dust and shining black above mouth-opening. Ocellar and postvertical bristles black, nearly equal in length; postverticals widely separated. Occiput with short black bristly-hairs behind postverticals and with a few longer whitish hairs just behind mouth-opening. Antennae blackish brown; 3rd segment globular, with brown supraapical arista. Ratio of length and width of 3rd antennal segment and length of arista — 0.4:0.3:2.2. Palpi yellow, slightly longer than proboscis, covered with silvery hairs and with a black terminal bristle which is

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Figs 10-12. Tachydromia stanislavi sp. n., male. 10, right periandrial lamella; 11, periandrium and cerci; 12, left periandrial lamella.

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 notopleural and one postalar bristles. Dorsocentrals uniserial brownish and very minute, only last pair in front of scutellum is long and black; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Legs predominantly dark brown; fore coxae, middle and hind coxae at tip, fore femora at basal two-third (except upper part) and middle femora at basal half vellowish red. Coxae whitish haired and silvery grey dusted. Fore femora and tibiae distinctly stout. Fore femora with a double row of long pale hairs beneath. Fore tibiae only short haired. Middle femora with a row of long black bristles becoming shorter towards tip, with a few longer pale hairs at base and with a row of short pale hairs beneath. Middle tibiae with very short but strong black hairs beneath and with short but sharp apical projection. Hind legs long and slender, hind femora with a posteroventral row of moderately short pale hairs in basal part. Wings with round tip, only very faint brownish at costal margin.  $R_{2+3}$  straight.  $R_{4+5}$  and M parallel near apex. Veins brownish. Halteres

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whitish yellow, stem darker.

Abdomen shining black brown, covered with only scattered brownish hairs especially on last segments. Genitalia (Figs 7—9) small and somewhat conical.

Length: body 1.4—1.5 mm; wing 1.5—1.6 mm. Female unknown.

Distribution. Russia: Amur Prov.

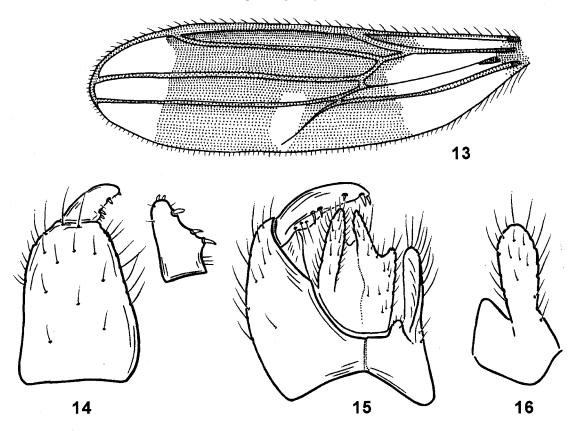
*Diagnosis.* This species very closely resembles *T. minima* Beck., the distinctive characters are given in the identification key.

### *Tachydromia stanislavi* sp. n. (Figs 10—12)

Holotype. &, Russia, Tuva Prov., near Shaganar, Ishtii-Hem, on large stones in river-bed, 21.VIII.1973 (leg. V. Kovalev) — in the ZMMU.

Paratypes. Russia: J, Indigirka river, mouth of river Istan-Jurakh, south of Mominsk distr., 8.VII.1976 (leg. V. Kovalev); J, Indigirka river, mouth of river Inyali, on stones, 15.VI.1976 (leg. V. Kovalev); Q, the same locality, 20.VI. 1976 (leg. V. Kovalev).

Description. Male. Frons shining black, slightly widening towards vertex. Vertex shining black. Occiput densely covered with silvery gray dust and



Figs 13—16. *Tachydromia tuvinica* sp. n., male. 13, wing; 14—16, genitalia: 14, right periandrial lamella, 15, periandrium and cerci, 16, left periandrial la mella.

shining black just above mouth-opening. Ocellar and postvertical bristles black, the latter are longer. Occiput with two-three short black bristly-hairs behind postverticals and with a few longer whitish hairs just behind mouth-opening. 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 — 0.4:0.3:1.7. Palpi yellow, slightly shorter than proboscis, covered with silvery hairs and with a black terminal bristle which is 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 notopleural and one postalar bristles. Dorsocentrals uniserial brownish and very minute, only last pair in front of scutellum is long and black; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Legs brownish; fore coxae, fore and middle femora (except tip and upper part), fore and middle tibiae at base and first segments of all tarsi vellowish brown. Coxae whitish haired and silvery grey dusted. Fore femora and tibiae distinctly stout. Fore femora with a double row of short pale hairs beneath. Fore tibiae only short haired. Middle femora with a row of long black posteroventral bristles becoming shorter towards tip, with a few long pale hairs at base and with anteroventral a row of short pale hairs. Middle tibiae with very short but strong black hairs beneath and with short, sharp apical projection. Hind legs long and slender, hind femora with a row of moderately short pale posteroventral hairs in basal part. Wings with round tip, hyaline, only very faint brownish at costal margin. R2+3 straight. R4+5 and M parallel near apex. Veins brownish. Halteres whitish yellow, stem darker.

Abdomen shining brown, covered with only scattered brownish hairs especially on last segments. Genitalia (Figs 10-12) small and somewhat conical.

Length: body 1.4—1.5 mm; wing 1.5—1.6 mm. Female. Very closely resembling male but middle tibiae without apical projection at tip beneath.

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Length: body 1.6 mm; wing 1.8 mm.

Distribution. Russia: Tuva Prov., Yakutia. Diagnosis. T. stanislavi sp. n. very closely resembles T. ozerovi sp. n., the distinctive characters are given in the identification key. Both these species (especially T. ozerovi) also are very closely allied to T. minima (Beck.) described from Siberia (Kantaika) and until now known from the type specimen (female) only. According to Becker's description (1900), T. minima is smaller (1.0 mm), base of fore femora yellow, first tarsal segment of hind legs yellowish brown and wings with yellowish brown veins.

# *Tachydromia tuvinica* sp. n. (Figs 13—16)

Holotype. J, Russia, Tuva Prov., near Shaganar, Ishtii-Hem, on large stones in river-bed, 25.VIII.1973 (leg. V. Kovalev) — in the ZMMU.

Paratypes. Russia:  $2\sigma$ ,  $\varphi$ , the same data; Mongolia:  $\sigma$ ,  $2\varphi$ , river Bulgan-Gol, 50 km above of Bulgan, 3.VII.1980 (leg. Kerzhner);  $\sigma$ ,  $\varphi$ , river Ulyastayn-Gol, 20 km S of Bulgan, 30.VI.1980 (leg. Kerzhner).

Description. Male. Frons shining black, slightly widening towards vertex. Vertex shining black. Occiput on the upper part densely covered with silvery gray dust and shining black above mouthopening. Ocellar and postvertical bristles black, nearly equal in length. Occiput with four short black bristly-hairs behind postverticals and with a few longer whitish hairs just behind mouth-opening. Basal antennal segments yellowish brown; 3rd segment brown, globular, with brown supraapical arista. Ratio of length and width of 3rd antennal segment and length of arista — 0.5:0.4:2.8. Palpi yellow, slightly shorter than proboscis, covered with long silvery hairs and with a black terminal bristle which is 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 notopleural and one postalar bristles. Dorsocentrals uniserial brownish and very minute, only last pair in front of scutellum is long and black; acrostichals absent. Scutellum with 2 pairs of bristles, the inner pair is longer. Legs predominantly brown; all coxae, fore and middle femora (except tip and upper part), all knees, tibiae at base and first segments of all tarsi yellowish brown. Coxae whitish haired and silvery grey dusted. Fore femora and tibiae distinctly stout. Fore femora with a double row of short pale hairs beneath. Fore tibiae only short haired. Middle femora with a row of long black posteroventral bristles becoming shorter towards tip, with a few longer pale hairs at base and with a row of short pale anteroventral hairs. Middle tibiae with very short but strong black hairs beneath and with short, sharp apical projection. Hind legs long and slender, hind femora with a row of moderately short pale posteroventral hairs in basal part. Wings with round tip, predominantly greyish brown clouded, leaving only base, apex from the end of radial vein and a small hyaline patch at hind margin.  $R_{2+3}$  straight.  $R_{4+5}$  and M parallel near apex. Veins brownish. Halteres whitish yellow, stem darker.

Abdomen shining brown, covered with only scattered brownish hairs especially on last segments. Genitalia (Figs 14—16) small and somewhat conical.

Length: body 1.6—1.8 mm; wing 1.7—1.9 mm. Female. Very closely resembling male but middle tibiae without apical projection beneath.

Length: body 1.7-1.9 mm; wing 1.8-2.1 mm. Distribution. Russia: Tuva Prov., Mongolia.

*Diagnosis.* It can be distinguished from all other species of this group by characters given in the identification key.

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