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A new cranefly species of the subgenus *Tipula* (*Platytipula*) Matsumura, 1916 (Diptera: Tipulidae) from the Russian Far East

Новый вид комаров-долгоножек подрода *Tipula* (*Platytipula*) Matsumura, 1916 (Diptera: Tipulidae) с Дальнего Востока России

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Key words: Diptera, Tipulidae, *Platytipula*, new species, Russian Far East.

Ключевые слова: Diptera, Tipulidae, *Platytipula*, новый вид, Дальний Восток России.

Abstract. Based on a male imago from the Russian Far East, a new species of long-palped craneflies, *Tipula* (*Platytipula*) *khasanika* Devyatkov, **sp.n.**, is described and illustrated. The new species belongs to the *ecaudata* group and differs from its congeners in the colouration of antennae, thorax, wings and abdomen, as well as in the structure of the hypopygium, especially its ninth tergite, inner gonostylus and posterior (outer) part of the aedeagus.

Резюме. Приведено иллюстрированное описание нового вида комаров-долгоножек *Tipula* (*Platytipula*) *khasanika* Devyatkov, **sp.n.** с Дальнего Востока России по имаго самца. Новый вид относится к группе *ecaudata*, отличается от близких видов более длинными усиками, окраской усиков, груди, крыльев и брюшка, а также деталями строения гипопигия, в особенности строением тергита 9, внутреннего гоностиля и заднего (наружного) отдела эдеагуса.

The subgenus *Platytipula* Matsumura, 1916 of the genus *Tipula* Linnaeus, 1758 includes small number of taxa and comprising 59 species and subspecies of the world fauna; 13 species and 1 subspecies are known from Russia, including 12 species from the Far East, of which 5 species are recorded from the Primorskii Krai [Oosterbroek, 2024].

In 2020, Dr V.V. Dubatolov of the Institute of Animal Systematics and Ecology of the Siberian Branch of the Russian Academy of Sciences (ISEA SB RAS) caught a male *Tipula* of the subgenus *Platytipula*, which was not associated with any known species, during a survey of the insect fauna of the Gamova Peninsula in the Khasanskii District of Primorskii Krai, Russia. The male of the new species was caught in a light trap and fixed in 70% ethanol. The specimen was processed using an MBS-10 binocular, and drawings were prepared using an ocular micrometer. Photographs of the wing, thorax and head were taken with a ToupCam digital camera mounted on the same dissecting microscope. The terminology used in this article is according to Alexander and Byers [Alexander, Byers, 1981].

An illustrated description of the adult male of *Tipula* (*Platytipula*) *khasanika* Devyatkov, sp.n. is given below. The holotype of the new species will be deposited in the collection of the Siberian Zoological Museum, ISEA SB RAS, Novosibirsk.

Nomenclatural acts introduced in the present work are registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:F99AC58F-E82F-448E-A9E3-8F700A852B52

Tipula (*Platytipula*) *khasanika* Devyatkov, **sp.n.**

Figs 1–7.

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Material. **Russia, *Primorskii Krai:*** holotype, ♂, Khasanskii district, Gamova Peninsula, Vityaz Bay, 42°35'30" N, 131°11'35" E, h ~ 80 m a.s.l., 28.IX–3.X.2020, V.V. Dubatolov leg.

Материал. **Россия, *Приморский край:*** голотип, ♂, Хасанский р-н, п-ов Гамова, бухта Витязь, 42°35'30" с.ш.; 131°11'35" в.д., h ~ 80 м н.у.м., 28.IX–3.X.2020, В.В. Дубатолов.

Description. *Male*. General colouration is yellow-brown. Body length about 12 mm, wing length 13.6 mm, antennae length 4.6–4.7 mm.

Head (Fig. 1) without parietal tubercle, yellow; brown patches behind eyes joined at occiput. Rostrum yellow, laterally brownish-yellow; nasus of medium length, with rather long setae at apex; three proximal segments of palpi brown or dark brown, distal segment brownish-white with brownish base. Antennae 13-segmented, long, curved posteriorly, slightly protruding beyond base of abdomen; three proximal segments yellow, other segments light brown with slightly thickened brown base; basal segment of flagellum 1.4 times longer than scape, apical segment small; longest verticils equal to or shorter than corresponding segments.

Thorax (Fig. 1). Pronotum yellowish, laterally brown. Prescutum yellow with 3 longitudinal stripes, lateral stripes dark brown, median stripe brown with slightly darker margins; lateral stripes in anterior part close to median one and separated from it by narrow brownish interval. Scutum dark brown, median part yellow. Scutellum medially brownish-yellow, laterally dark brown, with relatively long setae. Mediotergite

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(postscutum) yellow, laterally brown. Anepisternum and katepisternum dark brown, dorsally yellowish, without setae. Anepimeron yellowish; meron dark brown, yellowish dorsally. Laterotergites yellowish.

Legs. Coxae yellow, brownish in proximal part; trochanters yellow; femora yellow with dark brown apices; tibiae brown, spur formula 1–2–2; tarsi dark brown, claws with denticle.

Wings (Fig. 2) pale brownish with dark and light spots. Stigma, cell sc and margins on vein CuA dark brown; brown margins on m-cu and A_2; brownish spots in distal part of cells r_2 and r_3; slightly visible darkish spots on fork of M_{1+2} and in distal part of CuA_2 and A_2. Pale white-transparent spots: spot beginning at distal part of cell br and entering cell m_3; spot proximal to stigma and spot distal to stigma; large spot on posterior distal part of cell bm along CuA; small spot on posterior distal part of cell a_1 near A_2. Venation common to subgenus; Rs short, slightly longer than m-cu; M_{1+2} relatively long; cell d small. Veins dark brown, lighter in white-transparent areas. Wing flake with small, slightly visible bristles. Right halter dark brown with whitish base; left halter pale brownish, knob whitish with dark brown base.

Abdomen. Segments 1–5 brownish-yellow, gradually darkening from proximal segments to distal, without distinct dark stripes, sternites lighter than tergites; segment 6 brown, segments 7–8 dark brown.

Hypopygium (Fig. 3) mainly dark brown. Tergite 9 (Fig. 4) at apex with deep notch and large rounded posterolateral protrusions covered with rather long setae; margins of notch strongly sclerotized and blackened; ventral surface of posterolateral protrusions without blackened teeth. External gonostylus (Fig. 3, o gonst) finger-shaped, long, broader at the base, with rather long numerous setae. Internal gonostylus (Fig. 6) — vertical plate with large rounded dorsal comb, small oval external basal lobe directed outwards and upwards, numerous short bristles almost over entire surface, and sclerotized and blackened anterior proximal part; beak-like projection (rostrum) of gonostylus at base broad, situated slightly above middle of anterior margin of sclerite, apex of projection pointed and slightly bent downwards.

The posterior (outer) part of the aedeagus (Fig. 5) with a large medial, partially corrugated, semi-membranous protrusion (Figs 3, 5, m c pr). Aedeagus (Fig. 5, aed gd, 7) is a relatively short tube with a broad base.

Figs 1–2. Details of *Tipula* (*Platytipula*) *khasanika* sp.n., holotype male morphology. 1 — head and thorax, lateral view; 2 — right wing.

Рис. 1–2. Детали строения самца *Tipula* (*Platytipula*) *khasanika* sp.n., голотип. 1 — голова и грудь, вид сбоку; 2 — правое крыло.

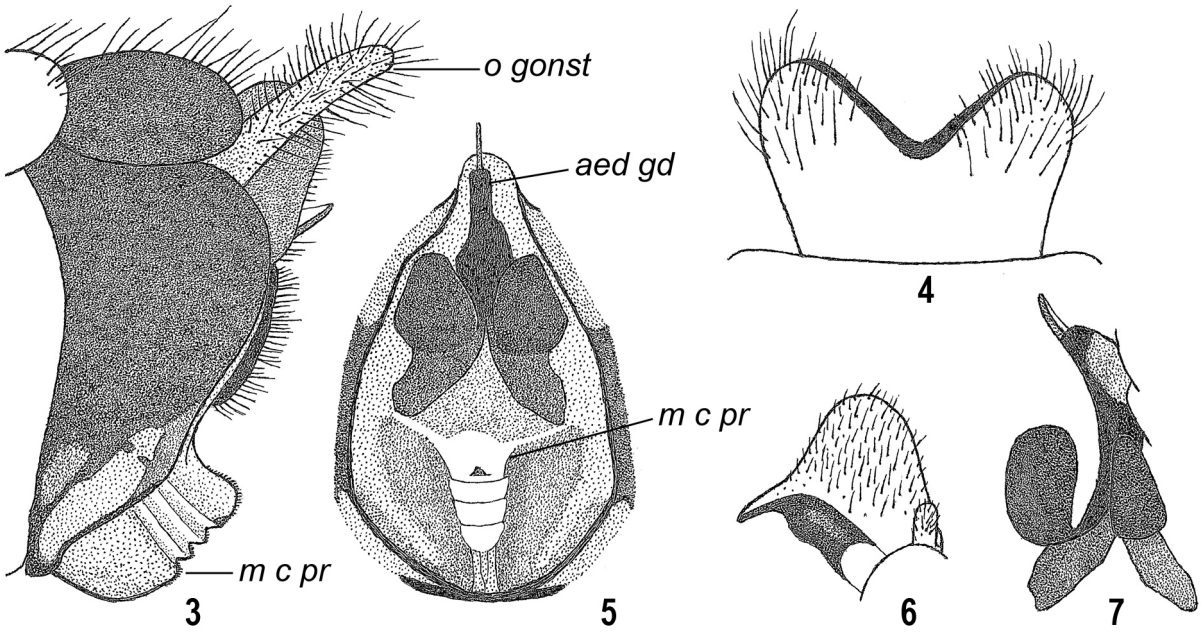
Female unknown.

Diagnosis. Yellow-brown medium-sized species. Antennae long, extending slightly beyond abdominal base when bent posteriorly; three proximal segments yellow, the remainder light brown with slightly thickened brown base; basal flagellomere 1.4 times as long as scape. Prescutum yellow with three dark brown longitudinal stripes; median stripe with slightly darker borders. Wings pale brownish with dark and light spots, dark brown stigma and cell sc. Tergite 9 with deep notch at apex; ventral surface of posterolateral protrusions of tergite 9 without blackened teeth. Inner gonostylus in the form of a vertical plate with a beak-shaped protrusion (rostrum); this protrusion is broad at the base, slightly above the middle of the anterior margin of the sclerite, and with a pointed and slightly downward curved apex. Posterior (outer) part of the aedeagus with a large medial, partly corrugated, semi-membranous protrusion.

Диагноз. Жёлто-коричневый вид среднего размера. Усики длинные, загнутые назад, немного выходят за основание брюшка; три проксимальных членика жёлтые, остальные светло-коричневые с чуть утолщённым коричневым основанием; базальный членик жгутика в 1,4 раза длиннее скапуса. Прескутум жёлтый с 3 тёмно-коричневыми продольными полосами, срединная полоса с чуть более тёмными каёмками. Крылья бледно-коричневатые с тёмными и светлыми пятнами, тёмно-коричневыми стигмой и ячейкой sc; крыловая чешуйка с мелкими щетинками. Тергит 9 на вершине с глубокой выемкой; вентральная поверхность заднебоковых выступов без зачернённых зубцов. Внутренние гоностили в виде вертикальной пластинки с клювовидным выступом, широким в основании, расположенным немного выше середины переднего края склерита, с заострённой и слегка изогнутой вниз вершиной. Задний (наружный) отдел эдеагуса с крупным медиальным, частично гофрированным полуперепончатым выступом.

Comparison with closely related species. According to the classification of the Palaearctic species of the subgenus *Platytipula* by E.N. Savchenko [Savchenko, 1961], *Tipula* (*Platytipula*) *khasanika* sp.n. belongs to the group of species *ecaudata* and among them the closest is *Tipula* (*Platytipula*) *imanishii* Alexander, 1933 (Primorskii Krai of Russia, Japan), which has a similar structure of tergite 9 and internal gonostylus of the male as *T.* (*P.*) *khasanika* sp.n. The new species can be easily distinguished from *T.* (*P.*) *imanishii* by the structure of the posterior (external) part of the aedeagus, namely by the presence of a large medial partially corrugated protrusion (Fig. 3, m c pr), which is absent in the male of *T.* (*P.*) *imanishii*. In addition, *T.* (*P.*) *khasanika* sp.n. differs from *T.* (*P.*) *imanishii* by longer antennae and colouration of antennae, thorax and wings [Alexander, 1933].

In the *ecaudata* group, the new species is also closely related to *Tipula* (*Platytipula*) *jocosipennis* Alexander, 1933 (Japan) and *Tipula* (*Platytipula*) *acirostris* Alexander, 1954 (Kuril Islands, Japan). *T.* (*P.*) *khasanika* sp.n. differs from the first species by longer antennae, colouration of antennae, thorax and abdomen, and also by the structure of the hypopygium, especially by structure of tergite 9 and the internal gonostylus [Alexander, 1933]. *T.* (*P.*) *khasanika* sp.n. also differs from the second species by longer antennae, colouration of the antennae, wings, abdomen and structure of the hypopygium [Alexander, 1954, 1955]. Thus, in the new species, posterior margin of tergite 9 with deep notch (Fig. 4), and ventral surface of posterolateral protrusions without blackened teeth; internal gonostylus with broad beak-shaped projection (rostrum) at base, apex of which is pointed and slightly curved downward (Fig. 6). In the male of *T.* (*P.*) *acirostris*, the posterior margin



Figs 3–7. Male genitalia of the holotype of *Tipula* (*Platytipula*) *khasanika* sp.n. 3 — hypopygium, lateral view; 4 — tergite 9, dorsal view; 5 — posterior (outer) part of aedeagus (aedeagal guide with gonapophyses and medial semi-membranous protrusion), posterior view; 6 — inner gonostylus, lateral view; 7 — gonapophysis, posterolateral view. Abbreviations: aed gd — aedeagal guide; m c pr — medial, partly corrugated, semi-membranous protrusion; o gonst — outer gonostylus.

Рис. 3–7. Гениталии самца *Tipula* (*Platytipula*) *khasanika* sp.n., голотип. 3 — гипопигий, вид сбоку; 4 — тергит 9, вид сверху; 5 — задний (наружный) отдел эдеагуса (эдеагус с гонапофизами и медиальным полуперепончатым выступом), вид сзади; 6 — внутренний гоностиль, вид сбоку; 7 — гонапофиз, вид сбоку и сзади. Сокращения: aed gd — эдеагус; m c pr — медиальный, частично гофрированный полуперепончатый выступ; o gonst — внешний гоностиль.

of tergite 9 is very finely emarginate, low posterolateral protrusions ventrally with small blackened teeth; the inner gonostylus with an unusually thin and slender beak-shaped projection (rostrum) [Alexander, 1955].

Habitat. A male of a new species was captured in a light trap placed on the southern slope of Vityaz Bay in the upper part of a forest ravine (mixed deciduous forest) with a small stream.

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