

## Description of a new species of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Neotropical Mexico

### Описание нового вида *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) из Неотропической части Мексики

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КЛЮЧЕВЫЕ СЛОВА: Diptera, Ceratopogonidae, *Atrichopogon*, неотропическая часть Мексики.

ABSTRACT. *Atrichopogon glukhvae*, a new species of biting midges from Neotropical Mexico, is described and illustrated.

РЕЗЮМЕ. Дано иллюстрированное описание *Atrichopogon glukhvae* — нового вида мокреца из Неотропической части Мексики.

#### Introduction

The genus *Atrichopogon* Kieffer, 1906 is represented in the Neotropical Region by 100 named species [Borkent & Spinelli, 2007]. This genus is one of the most diverse in the family; it includes many undescribed species in Mexico and elsewhere.

I examined a small series of *Atrichopogon* collected by A. Dampf in the southern state of Chiapas, Mexico [Huerta, 1996]. One previous species was described by Huerta [2001]. In this paper, another new species from the same collection is described.

The specimens were slide-mounted in Canada balsam using the technique described by Wirth & Marston [1968]. The drawings were made using a binocular microscope with attached camera lucida. Terms for structures follow those used by Borkent & Picado [2004] and Borkent & Spinelli [2007]. Measurements are given as the mean, followed by the range. The types of the new species are deposited in the Collection of Arthropods with Medical Importance (CAIM), Mexico City, Distrito Federal.

*Atrichopogon glukhvae* Huerta sp. n.

Figs 1–7

TYPE MATERIAL. Holotype: ♂ — adult on microscope slide, labelled “HOLOTYPE *Atrichopogon glukhvae* Huerta. Mexico, Chiapas, Esquipula, 4 august 1932, light trap, A. Dampf, Col. MF 2727”. Paratypes: 15 ♂♂ — with same label.

DIAGNOSIS. Flagellomeres 2–9 fused; gonocoxite sub-rectangle-shaped; gonostylus with pointed apex; aedeagal-

parameral complex V-shaped, with distinctive hyaline lateral lobes.

DESCRIPTION. **Male.** Head (Fig. 1): Eyes with interfacetal pubescence, broadly abutting medially for length of 3–4 facets. Antenna (Fig. 2) brown, with well-developed plume; with 13 flagellomeres, length of flagellum 1.08 mm; flagellomeres 2–9 fused; flagellomeres 9 and 10 without plume setae; ratio of flagellomeres 9/10: 0.87 (0.82–0.93, n=5); flagellomere 13 with apical projection basally not constricted; AR 0.80 (0.78–0.83; n=5). Palpus (Fig. 3) brown; third segment swollen at midlength, with a well-developed sensory pit; segments 4 and 5 separate, broadly abutting; PR 2.6 (2.5–2.7; n=5). Head width/mouthparts length 1.94 (1.89–2.0; n=5). Thorax dark brown. Scutum with lateral suture, sparsely covered with setae; postscutellum pale yellow, with 4 setae. Paratergite with one seta. Wing (Fig. 4) plain, without pattern of pigmented membrane, without macrotrichiae on membrane. Second radial cell 1.8 times as long as first; first radial cell almost obliterated. Wing length 1.20 mm (1.16–1.24; n=10); width 0.42 mm (0.40–0.44; n=10). CR 0.65 (0.64–0.66; n=10). Halter white. Legs light brown, including coxae. Hindtibial comb with 7 spines, spur length 0.06 mm. Empodia present. Abdomen brown.

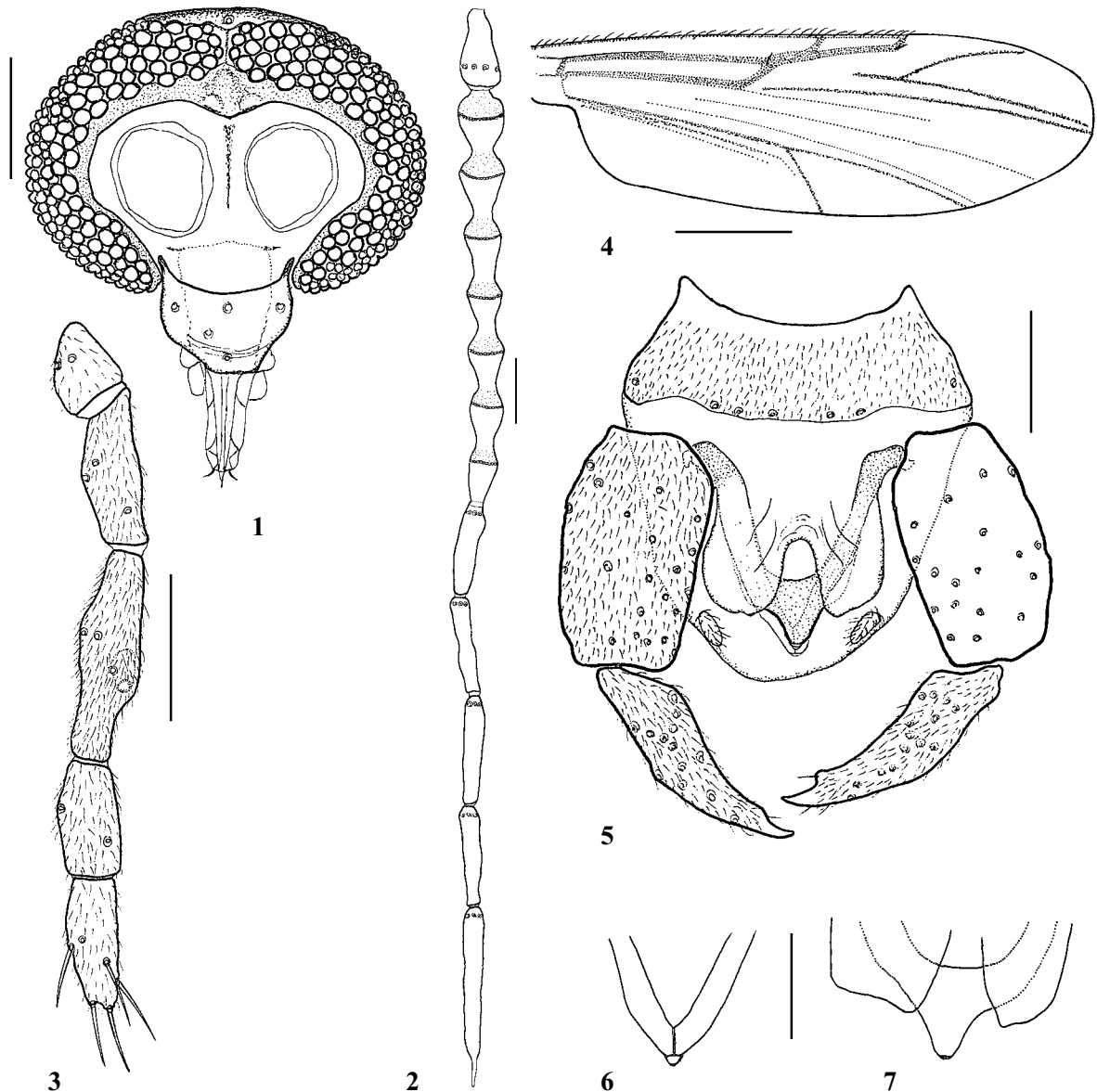
Genitalia (Fig. 5) pale brown. Tergite 9 short, extending to about level of gonocoxite apex, posterior margin rounded. Sternite 9 without caudomedian excavation, with 7–9 scattered setae near posterior margin. Gonocoxite subrectangle-shaped, 1.8 times as long as broad, without medial lobe. Gonostylus slightly curved, tapering from base, with pointed apex. Aedeagal-parameral complex (Figs 5–7) V-shaped, with ventral median process, distinctive hyaline lateral lobes, and posterodorsal V-shaped projection; lateral arms directed laterally, short, pointed. Cercus rounded.

**Female** unknown.

DISTRIBUTION. Mexico (Chiapas).

COMMENTS. The new species differs markedly from the other members of the genus *Atrichopogon* in the Neotropical Region in the shape of the aedeagal-parameral complex.

ETYMOLOGY. This species is named in honour of Professor Valentina Matveevna Glukhova (1928–2007), who have made an important contribution to the knowledge of *Culicoides* and other genera of Ceratopogonidae.



Figs 1–5. *Atrichopogon glukhovae* sp. n., male. 1 — head; 2 — antenna; 3 — palpus; 4 — wing; 5 — genitalia, ventral view; 6–7 — aedeagal-parameral complex, apex of dorsal and ventral portion. Scales: 0.16 mm (Fig. 1); 0.064 mm (Figs 2, 5); 0.04 mm (Figs 3, 6–7); 0.26 mm (Fig. 4).

Рис. 1–5. *Atrichopogon glukhovae* sp. n., самец. 1 — голова; 2 — антенна; 3 — щупик; 4 — крыло; 5 — гениталии, снизу; 6–7 — эдеагус и парамеры, дорсальная и вентральная часть. Масштабные линейки: 0,16 мм (Рис. 1); 0,064 мм (Рис. 2, 5); 0,04 мм (Рис. 3, 6–7); 0,26 мм (Рис. 4).

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## References

- Borkent A. & Picado A. 2004. Distinctive new species of *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Costa Rica // *Zootaxa*. No.637. P.1–68.
- Borkent A. & Spinelli G.R. 2007. Neotropical Ceratopogonidae (Diptera: Insecta) // Adis J., Arias J.R., Rueda-Delgado G. & Wantzen K.M. (eds.). Aquatic biodiversity in Latin America (ABLA). Vol.4. Sofia–Moscow: Pensoft. P.1–198.
- Huerta H. 1996. Los ceratopogónidos colectados por Alfonso Dampf en Chiapas, México (Diptera: Ceratopogonidae). Tesis Licenciatura. México D.F.: Universidad Nacional Autónoma de México (UNAM), Facultad de Ciencias. P.1–199.
- Huerta H. 2001. A new species of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Mexico // *Proceedings of the Entomological Society of Washington*. Vol.103. No.2. P.373–375.
- Wirth W.W. & Marston N. 1968. A method for mounting small insects on microscope slides in Canada balsam // *Annals of the Entomological Society of America*. Vol.61. No.3. P.783–784.