

This article was downloaded by: [NEICON Consortium]

On: 5 April 2011

Access details: Access Details: [subscription number 783448439]

Publisher Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Aquatic Insects

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713817864>

### *Diamesa subletti* sp.n., a new species of Chironomid (Diptera, Chironomidae) from Canada

E. A. Makarchenko<sup>a</sup>

<sup>a</sup> Far East Science Center, USSR Academy of Sciences, Institute of Biology and Pedology, Vladivostok, USSR

**To cite this Article** Makarchenko, E. A.(1986) '*Diamesa subletti* sp.n., a new species of Chironomid (Diptera, Chironomidae) from Canada', *Aquatic Insects*, 8: 3, 155 – 157

**To link to this Article:** DOI: 10.1080/01650428609361246

**URL:** <http://dx.doi.org/10.1080/01650428609361246>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

## *Diamesa subletti* sp.n., a New Species of Chironomid (Diptera, Chironomidae) from Canada

by

E.A. MAKARCHENKO

MAKARCHENKO, E. A.: *Diamesa subletti* sp.n., a New Species of Chironomid (Diptera, Chironomidae) from Canada. Aquatic Insects 8, 1986, No. 3, pp. 155-157.

A new chironomid species, *Diamesa subletti* sp.n. from Alberta, Canada, is described and illustrated.

E. A. MAKARCHENKO, Institute of Biology and Pedology, Far East Science Center, USSR Academy of Sciences, Vladivostok, USSR.

### *Diamesa subletti* sp.n. (Figs. 1-2)

**Material.** Holotype: ♂, Laggan, Popes Peak, Alberta, Canada, 26.VIII.1925 (O. Bryant). The holotype is deposited in the California Academy of Sciences (CAS 5).

The species is named in honour of Prof. J. E Sublette from the University of Southern Colorado, U.S.A.

The terminology follows Saether (1980).

**Male:** Total length *ca.* 4.5 mm.

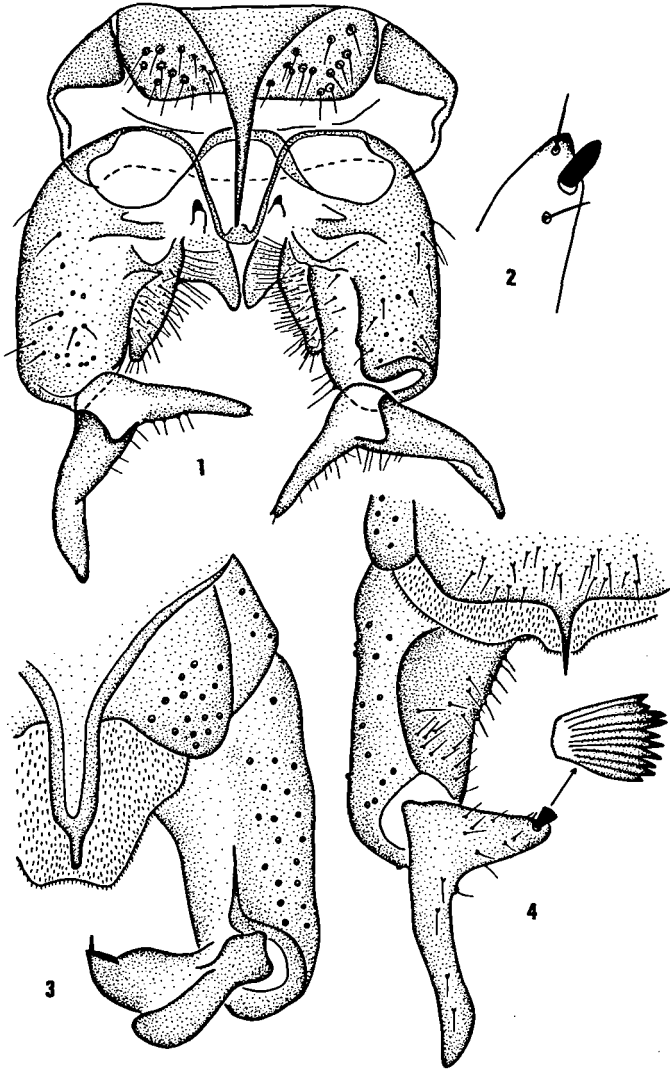
**Head:** Eyes bare (except microtrichia visible only at magnifications over 500x), without parallel-sided dorsomedial projection. Setae of coronal triangle, 4. Preoculars, 4. Verticals, 14-16. Postorbitals, 11. Clypeals, 10. Antenna with 14 antennomeres; antennal plume well developed; subapical seta of length of terminal flagellomere, 40  $\mu$ ; AR = 1.39-1.44. Length of maxillary palp segments length ( $\mu$ ), 122.5 : 180 : 185 : 165; second segment of maxillary palp with sensilla capitata (diameter 10  $\mu$ ); palp length/head width, 1.0.

**Thorax:** Anteprepronotum with 6 ventrolateral anteprepronotals. Dorsocentrals, 11-12. Prealars, 8. Scutellars, 32.

**Wing:** Length 4.2 mm. RM/MCu = 3.4. R and R<sub>1</sub> with 26-39 macrotrichia, R<sub>4+5</sub> with 4 macrotrichia. Anal lobe well developed.

**Legs:** Hind tibial comb consisting of 15 spines. Length ( $\mu$ ) and ratios of leg segments as follows:

P	f	t	Ta <sub>1</sub>	Ta <sub>2</sub>	Ta <sub>3</sub>	Ta <sub>4</sub>	Ta <sub>5</sub>	LR	SV	BV
P <sub>I</sub>	1384.6	1722.7	1239.7	611.8	370.3	96.6	128.8	0.72	2.51	3.60
P <sub>II</sub>	1416.8	1513.0	837.2	450.8	273.7	96.6	128.8	0.55	3.50	3.97
P <sub>III</sub>	1738.8	1867.6	1288.0	676.2	354.2	128.8	161	0.69	2.80	2.80



Figs. 1-4: Male hypopygium of *Diamesa subletti* (1-2), *Diamesa geminata* (3) and *Arctodiamesa appendiculata* (4). 1, 3-4 - dorsal views; 2 - distal part of gonostylus (inner lobe).

Hypopygium. Tergite IX with 15-16 short setae and relatively long and thin anal point. Gonocoxite with one flat, setaceous appendage. Gonostylus forked, inner and outer lobes of about equal shape; inner lobe 0.6-0.7 times shorter than outer one, with sparse, short bristles, ending with simple terminal spine and tooth (Fig. 2).

Differential diagnosis. Male *Arctodiamesa appendiculata* (Lundström) and *Diamesa geminata* Kieffer of tribe Diamesini have similar, i.e., forked, gonostyles as *Diamesa subletti* sp.n., but the new species is distinguished from them by the following characters:

– *Diamesa subletti* sp.n.: Eyes bare, 2nd segment of maxillary palp with sensilla capitata. Gonocoxite with flat appendage. Inner lobe of gonostylus with simple terminal spine and tooth (Fig. 2).

– *Diamesa geminata* Kieffer (Makarchenko, 1985): Eyes bare, 2nd segment of maxillary palp with sensilla capitata. Gonocoxite without appendage. Inner lobe of gonostylus with simple terminal spine and without tooth (Fig. 3).

– *Arctodiamesa appendiculata* (Lundström) (Makarchenko, 1984, 1985): Eyes hairy. 2nd segment of maxillary palp without sensilla capitata. Gonocoxite with a flat appendage. Inner lobe of gonostylus with a wide terminal spine, divided into 5-10 branches (Fig. 4).

#### ACKNOWLEDGEMENTS

I thank Dr. Jan Doughman (Geological Survey of the United States, Tucson, Arizona) for the loan of the type specimen of *Diamesa subletti*.

#### REFERENCES

- SAETHER, O. A. (1980): Glossary of chironomid morphology terminology (Diptera, Chironomidae). – Ent. Scand. 14: 1-51.
- MAKARCHENKO, E. A. (1984): K sistematike i rasprostraneniyu *Arctodiamesa appendiculata* (Lundström) (Diptera, Chironomidae). – In: *Biologia presnikh vod Dalnego Vostoka*: 92-98. Vladivostok.
- (1985): Khironomidi Dalnego Vostoka SSSR. Podsemeystva Podonominae, Diamesinae i Prodiamesinae (Diptera, Chironomidae): 1-208. Vladivostok.