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THE FIRST RECORD OF THE GENUS *APOMETRIOCNEMUS* SÆTHER, 1985: *A. JAPONICUS* SP. N. FROM THE PALAEARCTIC REGION (DIPTERA: CHIRONOMIDAE)

Kobayashi, T. & Suzuki, H., 1999. The first record of the genus *Apometriocnemus* Sæther, 1985: *A. japonicus* sp. n. from the Palaearctic Region (Diptera: Chironomidae). – Tijdschrift voor Entomologie 142: 65-67, figs. 1-9. [ISSN 0040-7496]. Published 22 September 1999.
Apometriocnemus japonicus sp. n. from Nagasaki, Western Japan is described. The new species is the first record from the Palaearctic Region, and the second species of the genus. It differs from the first species *A. fontinalis* Sæther, 1985 from U.S.A. mainly in having an extremely small antennal ratio.
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Keywords. – Chironomidae; Palaearctic; new species; *Apometriocnemus*

Sæther (1985) erected the new genus *Apometriocnemus* with the single included species *A. fontinalis* Sæther from Tennessee, U.S.A. Cranston & Oliver (1988) reported a second species of the genus, *A. beringensis* from Canada. This species was later transferred to the genus *Metriocnmeus* by Sæther (1995). Thus, only one species of the genus has been described until now.

We collected by net sweeping in Nagasaki, Western Japan, specimens that based on Sæther's diagnosis belong to *Apometriocnemus*; thus *A. japonicus* sp. n. is the second described species in the genus and the first record for the Palaearctic Region.

Seven male adults were examined. All specimens were preserved in 70 % ethanol prior to cleaning in 10% KOH and were mounted in Berlese fluid on microscope slides.

In the following description, measurements are usually expressed as the total range. The number of specimens examined was seven, except where otherwise noted; averages are given in parentheses. The general terminology follows that of Sæther (1980). All figures are based on the holotype except fig. 4, antenna.

Apometriocnemus japonicus sp. n.
(figs. 1-9)

Type material. – Holotype: male imago (No. 293-3), Japan: Nagasaki Prefecture: Todorokikyo (32°K57' N, 130°K7' E), 7.xii.1991. – Paratypes: 6 male imagines (No. 293-21, 40, 42, 50, 68, 70), same data as holotype. All types are deposited in Sasa's collection (Aza Sunaba 135-3, Aramata, Kurobe-shi, Toyama Prefecture, 938-0001 Japan).

Description

Male imagines (n=7, except where otherwise stated). – Wing length 1.25-1.40 (1.33) mm. Wing length/ length of profemur 2.25-2.46 (2.34). Coloration pale brown with vittae and postnotum blackish brown.

Head (fig. 3). – Antenna with 13 flagellomeres (fig. 4, paratype). AR extremely low, i.e. 0.15-0.16 (0.16, n=4). Last flagellomere 66-78 (72.6, n=4)*f*Êm long. Temporal setae 15-27 (22.5); inner and outer verticals, and postorbitals indistinguishable from each other. Dorsomedial extension very weak. Clypeus 16-20 (17.3) setae, and 90-100 (97.1) μm wide and an-

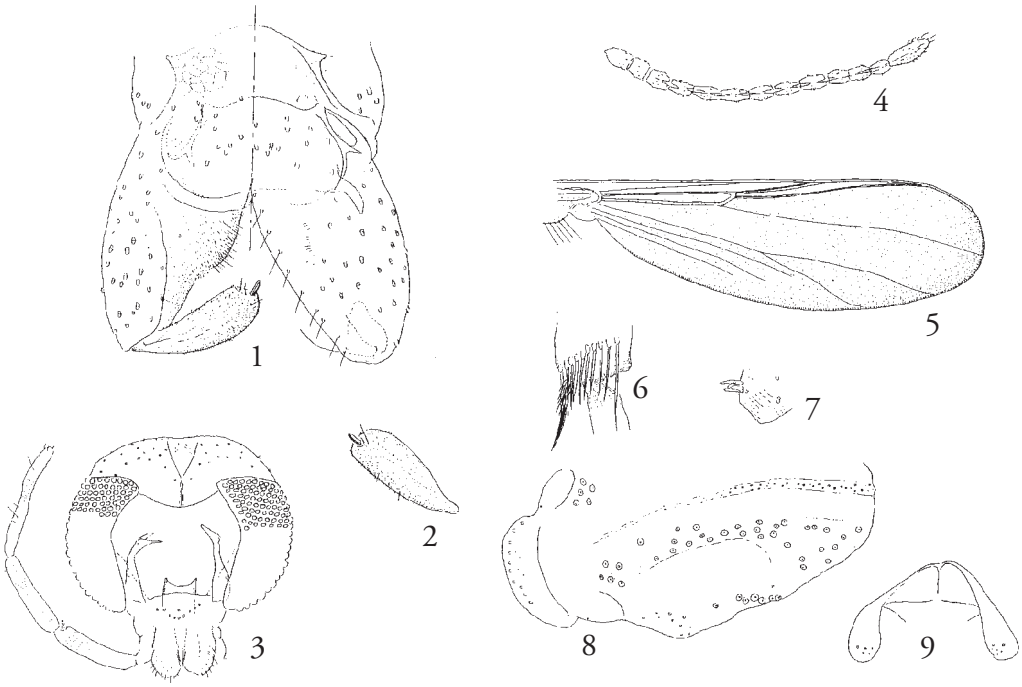

Fig. 1-9. *Apometriocnemus japonicus* sp. n., male imago. – 1, Hypopygium; 2, Gonostylus; 3, Head; 4, Antenna; 5, Wing; 6, Hind tibial comb; 7, Sensilla clavata on tip of palpomere III; 8, Thorax dorsal view; 9, Antepronotum.

tennal pedicel 90-100 (95.0) μm in diameter, clypeus 0.9-1.1 (1.02) times as wide as pedicel. Cibarial pump, tentorium and stipes as in fig.3. Tentorium 110-140 (126) μm long, 25-30 (25)μm wide at sieve pore. Palpomere length (in μm, n=6): 19-29 (25); 19-34 (29); 114-135 (128); 118-138 (130); 133-193 (165). Apex of third palpomere with 2-3 sensilla clavata (fig.7).

Thorax (fig.8). – Antepronotum with 3-8(5.6, n=6) setae lateral side (fig. 9). Dorsocentrals 22-36 (31.6, n=5) from strong sockets. Acrostichals 25-34 (29.5, n=2) also from distinct sockets. Prealars in anterior group of 6-8 (6.8, n=5) and posterior group of 7-10 (8.6). Scutellum with 14-19 (16.5, n=6): 9-10 stronger in posterior row, 6-7 weaker in front.

Wing (fig. 5). – Wing membrane with distinct punctation of microtrichia, relatively densely covered with setae. Anal lobe weak, not projecting. R_{2+3} runs close to R_1 ending closer to end of R_1 than to end of R_{4+5}, Vein R_{4+5} ends proximal to almost opposite to end of M_{3+4}. Cu_1 slightly curved. VR 1.36-1.48 (1.40). Brachiolum with 7-8 setae, all veins except R_{2+3} with setae. Costa strongly extended, its extension 160-210 (194.3)μm long. Squama fringed with 4-6 (5.0, n=5) setae.

Legs. – Spur of front tibia 28-32 (30.9) μm long, spurs of middle tibia 20-28 (23.2) μm and 15-20 (16.3) μm long, of hind tibia 42-55(50.0) μm and 22-25 (23.6) μm long. Comb of hind tibia with 9-11 (9.8) setae 30-50 μm long (fig. 6). Width at apex of front tibia 32-38 (34.9) μm, of middle tibia 33-42 (38.3) μm, of hind tibia 40-52 (47.5)μm. Pseudospur, sensilla chaetica and pulvilli absent. Length (in μm) and proportions of legs are given in table 1.

Hypopygium (fig.1). – Anal point absent. Tergite IX with 12-14 (12.9) setae and weak hexagonal patterns laterally; laterosternite IX with 6-9 (6.5) setae. Phallapodeme 62-70 (69.0) μm long. Transverse sternapodeme 74-84 (80.9) μm long. Virga absent. Gonocoxite 145-158 (149.0) μm, with reduced inferior volsella. Gonostylus (fig. 2) 65-72 (69.6) μm long, megaseta 8-12 (10.0) μm long.

Female imago, larva and pupa are unknown.

Diagnosis

Characters of the present specimens agree with the

Table 1. Length (μm) and proportions of legs (means in parentheses).

	fe	ti	ta1	ta2	ta3	ta4	ta5	LR	BV	SV
p1	510-620	540-660	370-460	190-240	140-170	80-100	70-80	0.67-0.71	2.94-3.18	2.74-2.85
	(572.3)	(618.6)	(425.0)	(214.5)	(152.2)	(90.6)	(76.1)	(0.67)	(3.02)	(2.79)
p2	550-675	540-650	270-340	125-150	100-125	70-80	60-75	0.49-0.52	3.87-3.97	3.88-4.18
	(629.5)	(603.0)	(308.0)	(138.0)	(114.0)	(76.0)	(68.0)	(0.51)	(3.90)	(4.03)
p3	590-720	700-850	340-410	150-190	150-190	80-110	60-80	0.48-0.50	3.36-3.79	3.70-4.01
	(658.2)	(780.0)	(375.5)	(173.9)	(168.0)	(102.0)	(74.0)	(0.48)	(3.51)	(3.84)

generic diagnosis of *Apometriocnemus* by Sæther (1985) in having hairy wings, squamal setae, curved Cu_1, long costal extension, acrostichals and dorsocentrals from clear sockets, lacking tarsal pseudospurs, sensilla chaetica, pulvilli and anal point proper; and in having a reduced inferior volsella. It is obvious that the specimens belong to the genus *Apometriocnemus.*

The male imago of *A. japonicus* sp. n., however, is clearly separable from *fontinalis* by its significantly lower antennal ratio, i.e. 0.15-0.16 in *japonicus*, 0.91 in *fontinalis*. Other characters that may further separate the new species from the known species are the longer apical palpomere than penultimate one (apical one 1.27 times as long as 4th palpomere in *japonicus*, but 0.82 times in *fontinalis*), and higher leg ratios of front and middle legs. The front leg ratio in *japonicus* is 0.67, but 0.54 in *fontinalis;* the middle leg ratio 0.51 in the former, 0.43 in the latter. *A. japonicus* has more numerous dorsocentrals, namely 16 in *fontinalis*, and 22-36 in *japonicus*. The number of acrostichals of *japonicus* (25-34) is much more than that of *fontinalis* (10). The dorsomedial extension is wedged shaped in *fontinalis* but very weakly so in *japonicus*. Venarum ratio of *japonicus* is a little larger (1.40) than that of f*ontinalis* (1.22). The structure of the gonostylus and gonocoxite of these two species shows many similarities, including the absence or vestige of an inferior volsella and anal point.

Acknowledgements

We would like to express our gratitude to Professor Dr. Ole A. Sæther of Bergen University for his critical reading of the manuscript, and to Dr.Manabu Sasa, Professor Emeritus of Tokyo University for his valuable advice.

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Received: 23 March 1999
Accepted: 28 April 1999