

A CONTRIBUTION TO THE OCCURRENCE OF *CULICOIDES MANCHURIENSIS* TOKUNAGA 1941 IN CZECHOSLOVAKIA

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Culicoides manchuriensis belongs to the subgenus *Beltranmyia* of the bloodsucking ceratopogonid genus *Culicoides*. In Czechoslovakia, it is a rare species. *Culicoides manchuriensis machardy* was found for the first time in South Moravia by Knoz in April 1968.

We found two females of *C. manchuriensis* near the Ecological Station of the Institute of Parasitology of the Czechoslovak Academy of Sciences, in Southern Bohemia. The locality is situated on a dyke between two ponds, Dobra vale and Skutek, in a warm and wet climatic region, with average annual temperatures of 6 - 7°C and an average precipitation of 650 - 750 mm. *Glyceria maxima*, *Typha angustifolia*, *T. latifolia* and *Iris pseudacorus* dominate in the plant community on the margin of the dyke.

The occurrence of ceratopogonids in the locality was observed from June to September 1984. In addition, *Culicoides obsoletus*, *C. impunctatus*, *C. odibilis*, *C. cubitalis* and *C. segnis* were recorded. *C. manchuriensis* was caught in an entomological net between 7 and 8 p.m. on August 20 and September 4.

The two specimens are very similar in their morphology. From their antennal ratio, numbers of antennal sensilla coeloconica, numbers of mandibular teeth and fronto-vertical ratio, they were identified as *C. manchuriensis*. However, their measurements are different — e.g. wing length 1.37 mm and 1.05 mm, respectively. The wing marking is more conspicuous in the first specimen.

C. manchuriensis was described for the first time by Tokunaga in 1941. In 1960, Campbell and Pelham-Clinton described *Culicoides machardy*, a new species in England, which was larger than *C. manchuriensis*, but quite identical in morphology. By contrast, Gutsevich (1973) considers *C. manchuriensis manchuriensis* and *C. m. machardy* to be two subspecies of a single species. Based on Gutsevich's data, the minimum wing length in *C. m. machardy* is 1.3 mm.

TABLE

Measurements of *Culicoides manchuriensis* found in August 20 and September 4 in 1984

	August 20	September 4
Antenna (μm)	625	406
Antennal sensilla coeloconica	3 (4), 4-10 (0) 11-12 (1), 13 (0) 14 (2), 15 (0) 3 (4), 4 (0), 5 (1) 6-10 (0), 11-12 (1) 13-15 deleted	3 (4), 4 (1), 5-10 (0) 11-12 (0), 13 (1) 14 (2), 15 (0) 3 (4), 4-10 (0) 11 (1), 12 (0), 13 (1) 14 (2), 15 (0)
Antennal ratio	1.13	1.14
Fronto-vertical ratio	0.75	0.75
Mandibular teat	8	8
Wing length (mm)	1.37	1.05
Costa (mm)	0.84	0.57
Costal ratio	0.61	0.54
Spermatheca (μm)	91.8	70.1

Thus, the specimen found by us in August was identified as *Culicoides manchuriensis machardy*, the one found in September as *C. m. manchuriensis*. The second subspecies was recorded for the first time in Czechoslovakia.

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PRZYCZYNEK DO WYSTĘPOWANIA *CULICOIDES MANCHURIENSIS*
TOKUNAGA 1941 W CZECHOSŁOWACJI

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W materiale z południowych Czech znaleziono dwie samice *Culicoides manchuriensis manchuriensis* i *C. manchuriensis machardy*. Przedstawiono charakterystyczne dane biometryczne.