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Two new species of Syrphidae (Diptera) from Chukotka (Northern Russian Far East)

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Abstract

Two new species, *Platycheirus beringiensis* sp. n. and *Cheilosia chukotana* sp. n., are described from Chukotka (northern part of Russian Far East). The new *Platycheirus* is close to *Platycheirus immarginatus* (Zetterstedt), but differing by the following characters: fore tibia with a black stripe on posterior side; mid-femur without fine black curved hairs directed to the base of the femur; mid-tibia without long anteroventral hairs; abdomen black with fine brownish lustre on tergites. The new *Cheilosia* species is close to *Ch. semifasciata* Becker, but differs by its characteristic sharply raised central knob, and by lack of transversal stripe and indentation in anterior third of frons.

Key words: new species, description, *Platycheirus*, *Cheilosia*, hover flies

Introduction

The genera *Cheilosia* and *Platycheirus* are two of the largest genera of Syrphidae in the temperate zones of the Palaearctic. Both genera have their maximum species richness in mountainous regions. Currently the syrphid fauna of Russia contains 73 species of *Platycheirus* and 118 species of *Cheilosia*. The latest two newly discovered species of *Platycheirus* were recently described from Northern Siberia, from the tundra of the Taimyr Peninsular (Barkalov & Nielsen 2012; Barkalov 2013), and the last new *Cheilosia* species was described from Siberia by Barkalov (2007). Despite intensive collecting in different places in Siberia, we have not found any new species of this genus over the last seven years. Hence, we were pleasantly surprised to discover specimens of unknown species in our material from the lower part of the River Anadyr (Southern Chukotka).

Material

During an expedition to Chukotka by the Institute of Systematics and Ecology of Animals RAS, Novosibirsk, Russia (abbreviated as SZM in the following), many specimens of Syrphidae (Diptera) were collected. Specimens of *Cheilosia chukotana* sp. n. were collected on flowers of *Spirea beauvediana* in a swampy meadow near thickets of *Pinus pumila*, *Alnus fruticosa* and *Sorbus sibirica* (fig. 1). *Platycheirus beringiensis* sp. n. was collected by sweep netting on blooming *Leymus ajanensis* and *Calamagrostis langsdorffii* (fig. 2). The holotypes of these new species are deposited in the Siberian Zoological Museum, and some paratypes of *Platycheirus beringiensis* sp. n. are in the personal collection of Valerij Mutin.

In the keys to Far Eastern *Platycheirus* (Mutin in Mutin & Barkalov 1999), *P. beringiensis* sp. n. runs to *P. immarginatus* Zetterstedt, but differs in the following:

36. Bristles on posterior surface of fore-femur flattened apically and curved towards tip of femur *P. mongolicus* Stackelberg
- Bristles on posterior surface of fore-femur rather straight and thinning evenly to tips 37
37. Abdomen black or with only reddish marks, mid-tibia without long dense pale hairs anteriorly (fig. 5C), mid-femur without curved black hairs in apical part (fig. 5D), mid-tibia ventrally with black stripe in basal third (fig. 5A) . . . *P. beringiensis* sp. n.
- Abdomen with large yellow spots, mid-tibia with long dense pale hairs anteriorly (fig. 5G), mid-femur with curved black hairs in apical part, mid-tibia without black stripe in basal third. *P. immarginatus* Zetterstedt

In the key to Nearctic *Platycheirus* (Vockeroth 1990), *P. beringiensis* sp. n. goes to couplet 31 but differs in the following:

31. Tergites III and IV each with a pair of large yellow spots *P. immarginatus* Zetterstedt
- Tergites III and IV without large yellow spots, completely black or with a pair of silvery spots 32
32. Fore femur with tuft of closely appressed long wavy white hairs. Fore tibia almost uniformly broadened from base almost to apex, without long black hair posteriorly (fig. 5B). Hairs of scutum and scutellum mostly yellow. Hairs of pleura black. *P. beringiensis* sp.n.
- Fore femur with subbasal tuft of 4 straight white hairs. Fore tibia strongly and abruptly broadened posteriorly at 3/4 length, with long black hair on posterior middle. Hairs of scutum and scutellum mostly black. Hairs of pleura all pale *P. setipes* Vockeroth

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References

- Barkalov, A.V. (2002) A subgeneric classification of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae). *Entomologicheskoe Obozrenie*, 81 (1), 218–234. [in Russian with English abstract]
Barkalov, A.V. (2007) A new species, new synonyms, and new records of the hover-fly genus *Cheilosia* Meigen (Diptera, Syrphidae). *Entomologicheskoe Obozrenie*, 86 (2), 424–433. [in Russian with English abstract]
Barkalov, A.V. (2013) A new *Platycheirus* Le Peletier et Serville, 1828 (Diptera, Syrphidae) species of the *manicatus* subgroup, from the Taimyr Peninsula (Northern Siberia). *Zootaxa*, 3681 (2), 175–181.
<http://dx.doi.org/10.11646/zootaxa.3681.2.7>
Barkalov, A.V. & Nielsen, T.R. (2012) A new *Platycheirus* species of the *manicatus* Meigen subgroup from the arctic Russia (Diptera: Syrphidae). *Entomologica Fennica*, 23, 165–168.
Mutin, V.A. & Barkalov, A.V. (1999) 62. Family Syrphidae. In: Lehr, P.A. (Ed.), *Key to the insects of Russian Far East. Vol. 6. Diptera and Siphonaptera. Part 1.* Dal'nauka, Valdivostok, pp. 342–500. [in Russian]
Vockeroth, J.R. (1990) Revision of the Nearctic species of *Platycheirus* (Diptera, Syrphidae). *Canadian Entomologist*, 122, 659–766.
<http://dx.doi.org/10.4039/ent122659-7>