

A new *Platycheirus* species of the *manicatus* Meigen subgroup from the arctic Russia (Diptera: Syrphidae)

Anatolii V. Barkalov & Tore R. Nielsen

Barkalov, A. V. & Nielsen, T. R. 2012: A new *Platycheirus* species of the *manicatus* Meigen subgroup from the arctic Russia (Diptera: Syrphidae). — Entomol. Fennica 23: 165–168.

A new *Platycheirus* species of the *manicatus* subgroup is described from Taimyr in the arctic Russia. It is characterised by a facial knob, a row of scattered straight setae from base to apex postero-laterally on fore tibia, and a broad, angulate basal segment of front leg. Tergites 2–4 each with a couple of vague dark bluish grey dust spots. It is compared with similar Holarctic tundra species.

A. V. Barkalov, Institute of Animal Systematics and Ecology of RAS, Siberian Branch, Novosibirsk-91, Frunze str. 11, Russia; E-mail: bark@eco.nsc.ru
T. R. Nielsen, Sandvedhagen 8, NO-4318 Sandnes, Norway; E-mail: tore@nielsen.cc

Received 6 April 2011, accepted 24 February 2012

1. Introduction

In a series of articles (Barkalov & Nielsen 2004, 2007a, 2007b, 2008a, 2008b, 2009) we have reported on the *Platycheirus* fauna of central parts of the Palaearctic region. The present paper describes a new species of the *manicatus* subgroup (Vockeroth 1990), a species with slender fore tibia but with first two tarsal segments much dilated in the male.

The new species is similar to *groenlandicus* Curran, 1927, *kittilaensis* Dušek & Láška, 1982, *peckae* Bagatshanova, 1980, *subordinatus* (Becker, 1915), and *thylax* Hull, 1944. The key presented in this paper points out separating characters between the species.

2. Material and methods

The species was collected on an expedition to Taimyr in 2010 by Zoological Museum of the Institute of Systematics and Ecology of Animals

RAS, Novosibirsk, Russia (ZMN). The drawings have been made with the aid of a drawing mirror attached to a Wild M5 microscope.

3. *Platycheirus bartschi* sp. n.

Type material. Holotype: Male, labelled “Krasnoyarskij Kraj, Taimyr National District, 60 km NW of Khatanga settlement, Novaya River, Reserve, Ary-Mas field station, 72.5° N, 101.94° E, 11.VII.2010. V.K. Zinchenko” (translated from Russian). The type is kept as pinned material at ZMN.

Diagnosis. Male. Eye angle about 105°. Occiput pale haired. Frons and face subshining with moderate light grey dusting. Antennae black. Facial knob with central prominence and upper mouth-edge protruding. Basal segment of front leg rather broad, laterally angulate on apical third. Fore tibia postero-laterally with straight, scattered setae. Tergites 2–4 each with a couple of vague dark bluish grey dust spots.

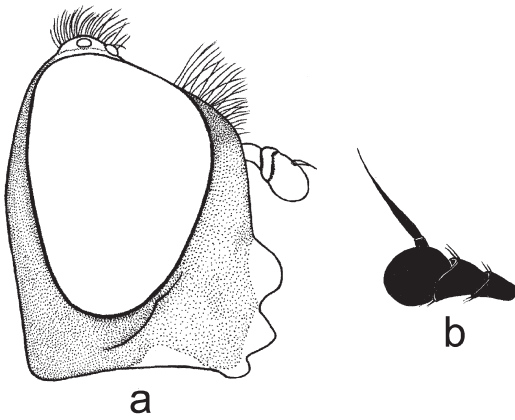


Fig. 1. *Platycheirus bartschi* sp. n., male holotype. – a. Head in profile. – b. Antenna laterally.

Description. Male.

Head (Fig. 1a–b). Eye angle approximately 105° . Occiput pale haired with single black hairs on anterior part of ocellar triangle. Ocellar triangle equilateral. Antennae black; 3rd segment short, about as long as wide (Fig 1b). Facial knob produced (Fig 1a). Frons and face subshining, dulled by greyish dusting, the hairs on frons black.

Thorax (Figs. 2a–c). Scutum, scutellum and pleurae black, lightly white dusted, the hairs white yellow.

Wing. Membrane brownish, completely covered with microtrichiae; inner angle between

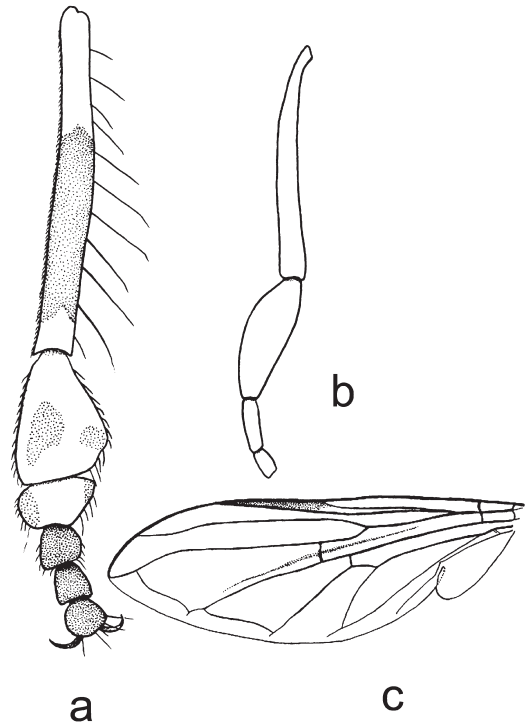


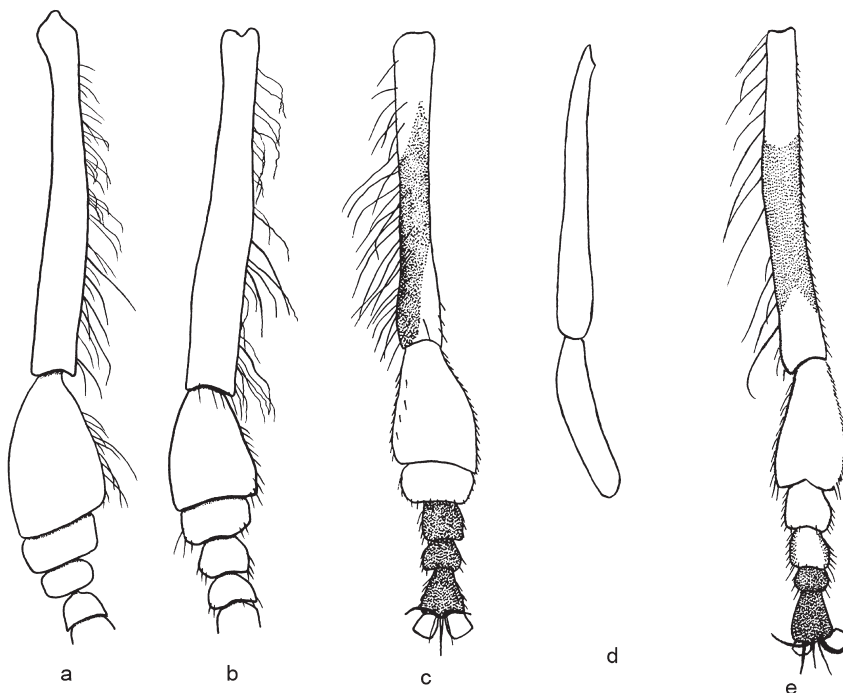
Fig. 2. *Platycheirus bartschi* sp. n., male holotype. – a. Left fore tibia and tarsus dorsally. – b. Hind leg with basitarsus thickened, laterally. – c. Wing.

vena R4+5 and M1+2 almost right (Fig. 2c). Haltere knob blackish brown, calypter light greyish brown, its rim darkened.



Fig. 3. Type locality at Ary-Mas field station, a river bank with blooming *Ranunculus pro-pinquus* C.A. Mey, *Trollius sibiricus* Schipz., *Dryas punctata* Juz., and other herbs. Photo: A. V. Barkalov.

Fig. 4. *Platycheirus* spp. – a. *Platycheirus peckae*, left fore tibia and tarsus dorsally. – b. *P. thylax* left fore tibia and tarsus dorsally. – c. *P. groenlandicus*, right fore tibia and tarsus dorsally. – d. *P. kittilaensis* hind tibia and metatarsus laterally. – e. *P. subordinatus* right fore tibia and tarsus dorsally.



Legs. Mostly black, but all knees and the tip of fore tibia narrowly yellow.

– Fore legs. Tarsal segments 1–2 yellow white, each segment with a couple of dark markings. The three last segments contrasting brownish black. Fore tibia postero-laterally with a row of scattered black bristles (Fig. 2a). Femur ventrally with a row of short strong black bristles, posteriorly with long light hairs in basal half and long black bristles in apical half.

– Mid legs. Mid tarsus simple, length of basitarsus nearly equals the length of segments 2–4 together. Femur posteriorly covered with yellow hairs and bristles.

– Hind legs. Basitarsus somewhat thickened, nearly 2 times as thick as tibia at tip (Fig. 2b).

Abdomen. Narrow, tergites 2–4 each with a couple of obscure bluish grey dust spots, covered with white hairs, erect on sides and depressed on middle. Sternites shining metallic black, lightly white dusted.

Body length (from frons till tip of abdomen): 7.7 mm.

Wing length: 6.7 mm.

Female. Unknown.

Ecology. The specimen was caught on the flowering bank of the Novaya River, at Ary Mas

field station (Fig. 3), near the northernmost forest in the world (of *Larix dahurica* Laws.) in the background of the photo.

Etymology. The species is named in honour of the late Swedish entomologist Hans D. Bartsch for his great contribution to the knowledge of the Scandinavian hoverfly taxonomy and fauna.

4. Key to males of *P. bartschi* sp. n. and similar holarctic tundra species of the *manicatus* subgroup (Fig. 2, Fig. 4).

1. Fore tibia postero-laterally from base to apex with a row of scattered, straight setae (Fig. 2) 2
- Fore tibia from base to apex with a dense row of long soft hairs, or with a mixture of long and short hairs (Figs. 4a–c) 4
2. Hind basitarsus slender, only slightly thicker than hind tibia at apex (Fig. 4d). Abdominal spots light brown.
- Hind basitarsus swollen, nearly 2× thicker than hind tibia at apex (Fig. 2b) 3
3. Fore basitarsus rather broad, laterally angu-

P. kittilaensis Dušek & Láska, 1982

late on apical third (Fig. 2a). Abdominal spots metallic blue with light greyish dusting.

P. bartschi sp. n.

- Fore basitarsus widening evenly from base to tip, about twice as long as wide (Fig. 4e). Abdominal spots light brown.

P. subordinatus Becker, 1915

4. Mid tibia with a tuft of long wavy hairs on about basal third of anteroventral surface, the hairs at least 3 times as long as tibial diameter and much longer than hairs on rest of anteroventral surface. 5
- Mid tibia with the anteroventral hairs short, at most slightly longer than tibial diameter.

P. thylax Hull, 1944

5. Eyes touching for a distance which is about 1.5 times as long as the distance between the ocelli. Basitarsus of fore leg discoid, laterally with some semilong black hairs (Fig. 4a). 2nd and 3rd tarsal segments rectangular and about twice as broad as long. Hind basitarsus swollen, about 1.5 times as thick as tibia at apex. 2nd basal cell and anal cell of wing bare on about basal 1/3. The spots on tergites 2–4 pale to dark orange, greyish dusted.

P. peckae Bagatshanova, 1980

- Eyes touching for a distance which is equal to the distance between the ocelli. Basitarsus of fore leg subtriangular (Fig. 4c), 3rd joint longer than wide. Hind basitarsus only slightly thicker than tibia at apex. 2nd basal cell and anal cell of wing all microtrichose. The spots on tergites 2–4 bluish grey.

P. groenlandicus Curran, 1927

Acknowledgements. We are grateful to Russian Foundation for Basic Research, grant No. 10-04-00093-a for financial support of the expedition, and to Dr. Vadim K. Zinchenko who collected this unknown species. We are also grateful to the administration of the Taimyr Biosphere Reserve for their help in conducting the field research.

References

- Bagatshanova, A. K. 1980: New species of Syrphidae (Diptera) from Central Yakutia. — *Revue d'Entomologie de l'URSS*. 59. 2: 421–427. [In Russian.]
- Barkalov, A. V. & Nielsen, T. R. 2004: On a new *Platycheirus* (Diptera, Syrphidae) from Turkmenistan. — *Norwegian Journal of Entomology* 51: 123–126.
- Barkalov, A. V. & Nielsen, T. R. 2007a: A new *Platycheirus* species of the *manicatus* subgroup (Diptera, Syrphidae) from Caucasus. — *Norwegian Journal of Entomology* 54: 129–134.
- Barkalov, A. V. & Nielsen, T. R. 2007b: *Platycheirus* species (Diptera, Syrphidae) from Yakutia, Eastern Siberia, with description of two new species. — *Volucella* 8: 87–94.
- Barkalov, A. V. & Nielsen, T. R. 2008a: *Platycheirus* species (Diptera, Syrphidae) from the Altai Mountains, SE Siberia, with description of five new species. — *Norwegian Journal of Entomology* 55: 91–104.
- Barkalov, A. V. & Nielsen, T. R. 2008b: *Platycheirus* species (Diptera, Syrphidae) in the Tuva district of southern Siberia, with description of a new species. — *Norwegian Journal of Entomology* 55: 223–227.
- Barkalov, A. V. & Nielsen, T. R. 2009: New material of Central Palaearctic *Platycheirus* (Diptera, Syrphidae) with description of three new species. — *Norwegian Journal of Entomology* 56: 1–8.
- Vockeroth, J. R. 1990: Revision of the Nearctic species of *Platycheirus* (Diptera, Syrphidae). — *Canadian Entomologist* 122: 659–766.