A new species of the genus *Thinophilus* (Diptera: Dolichopodidae) from Ukraine and Kazakhstan

Новый вид рода *Thinophilus* (Diptera: Dolichopodidae) из Украины и Казахстана

O.P. Negrobov*, O.O. Maslova & O.V. Selivanova

О.П. Негробов, О.О. Маслова, О.В. Селиванова

O.P. Negrobov, Voronezh State University, 1 Universitetskaya Sq., Voronezh 394006, Russia. E-mail: negrobov@list.ru

O.O. Maslova, Voronezh State Pedagogical University, 86 Lenin Sq., Voronezh 394043, Russia. E-mail: oom777@yandex.ru

O.V. Selivanova, Voronezh State University, 1 Universitetskaya Sq., Voronezh 394006, Russia.

Thinophilus sinclairi **sp. nov.** is described from the coast of the Sea of Azov, Ukraine, and from northern Kazakhstan. The new species is similar to *T. spinitarsis* Becker but differs from it in the structure of the hypopygium, apex of fore tibia without long black dorsal seta, and segments 2–4 of fore tarsi with long posterodorsal black setae.

Thinophilus sinclairi **sp. nov.** описан с побережья Азовского моря (Украина) и из Северного Казахстана. Новый вид близок к *T. spinitarsis* Becker, от которого отличается строением гипопигия, отсутствием длинной черной дорсальной щетинки на вершине передней голени и наличием длинных черных заднедорсальных щетинок на 2–4-м сегментах передних лапок.

Key words: Ukraine, Kazakhstan, Diptera, Dolichopodidae, *Thinophilus*, new species

Ключевые слова: Украина, Казахстан, Diptera, Dolichopodidae, *Thinophilus*, новый вид

INTRODUCTION

A total of 127 species are known in the genus *Thinophilus* Wahlberg, 1844 worldwide (Grichanov, 2017). At present, 23 species of this genus are known from the Palaearctic Region. Negrobov published the latest revision of *Thinophilus* (Negrobov, 1971) and an overview of the Palaearctic species in this genus (Negrobov, 1979).

Several new species have been described after 1971, namely, *Thinophilus ornatus* Negrobov et Grichanov, 1982 and *T. sinensis* Yang et Li, 1998 from the Palaearctic and Oriental parts of China, *T. nigripennis* Negrobov, Kumazawa et Tago, 2014 from Japan, *T.* (*Schoenophilus*) *grootaerti* Negrobov, Maslova et Selivanova, 2016 and *T. ovtshinnikovae* Negrobov, Maslova et Selivanova, 2016 from the Primorie Territory of Russia (Negrobov & Grichanov, 1982; Yang & Li, 1998; Negrobov et al., 2014; Negrobov et al., 2016).

Four species of *Thinophilus* were recorded in the fauna of Ukraine, *T. argyropalpis* Becker, 1907, *T. flavipalpis* (Zetterstedt, 1843), *T. ruficornis* (Haliday, 1838) and *T.* (*Schoenophilus*) *versutus* Haliday, 1851 (Negrobov, 1976, 1980; Negrobov & Bulli, 1987). The specimens previously recorded from Ukraine as *T. spinitarsis* Becker, 1907 (Negrobov & Bulli, 1987) actually belong to a new species. Only one species of *Thinophilus*, *T. argyropalpis*, is known from Kazakhstan (Negrobov, 1971).

* *Corresponding author.*

MATERIAL AND METHODS

The material was collected by net-sweeping on a sandy shore of the Molochnyi firth of the Sea of Azov. Additional specimens were taken from the material collected in northern Kazakhstan kept at the Voronezh State University. The morphological terminology follows McAlpine (1981).

TAXONOMIC PART

Order **DIPTERA**

Family **DOLICHOPODIDAE**

Subfamily HYDROPHORINAE

Genus ***Thinophilus*** Wahlberg, 1844

Thinophilus sinclairi **sp. nov.**
(Figs 1–4)

Holotype. Male; **Ukraine**, *Zaporizhia* (= *Zaporozh'e*) *Province*, Kirillovka, Molochnyi firth of the Sea of Azov, sandy shore, 17.VI.1986 (Bulli leg.).

Paratypes. **Ukraine**: 2 males, 7 females, same data as in holotype. **Kazakhstan**: 1 male, 3 females, 100 km S of Qostanai (= Kustanay), 6.VI.1983 (Korobov leg.).

The holotype is deposited at the Zoological Institute of the Russian Academy of Sciences (St Petersburg). The paratypes are kept in the collection of the Voronezh State University.

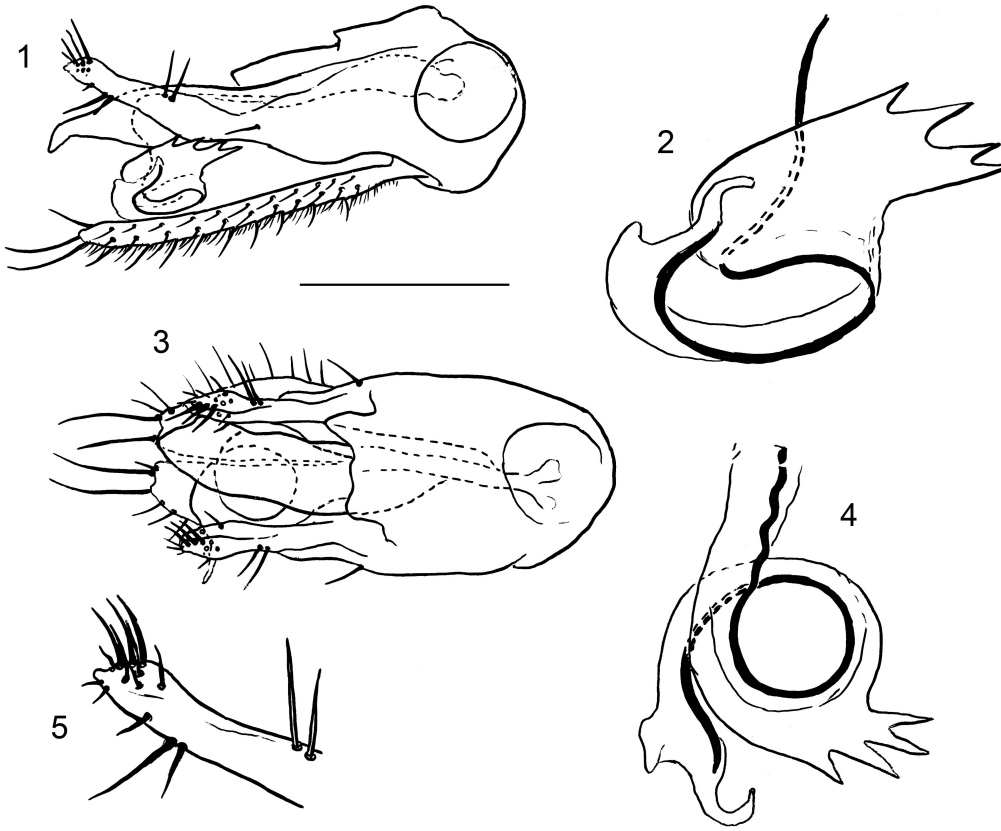
Description. Male. Body length 3.4–3.8 mm; wing length 3.6–3.9 mm.

Frons shining purple, with green tinge and slight pollinosity. Face green, shining, without pollinosity, near suture wider than postpedicel. Antenna yellow, with a small brown spot at apex; arista black. Postpedicel reniform, with oval apex, longer than wide. Ratios of epistoma length to clypeus length, face width at suture and palpus length as 1.0 : 1.9 : 1.2 : 2.2. Arista with short hairs, placed at the middle of dorsal part of postpedicel. Ratios of postpedicel length to width and to arista length as 0.9 : 1.0 : 2.7. Pedicel with projection jutting out into postpedicel. Proboscis dark brown with yellow hairs. Palpus light yellow with black hairs. Lower postocular setae white.

Thorax dark green. Mesonotum with grey pollinosity; pleura with dense grey pollinosity. Propleuron with 5–6 long yellow setae. Acrostichal setae absent. Six pairs of dorsocentral setae.

Legs yellow except for dark coxae, major part of fore femur, basal part of hind femur and apex of tarsi; legs with black setae and hairs, fore coxa with black hairs. Fore femur with short ventral setae and on apical half with several anterodorsal setae which shorter than or equal to width of fore femur. Fore tibia with four long anterodorsal and two short posterodorsal setae, with short erect ventral hairs, without long black setae at apex. Segment 1 of fore tarsus curved at apex, with a comb of short erect setae at apex, with short anterodorsal and long posteroventral setae, which longer than diameter of segment 1. Segments 2–4 of fore tarsus each with a long black posterodorsal seta being considerably longer than diameter of segment. Segment 5 of fore tarsus widened. Segments 2, 3 and 4 of fore tarsus bare on ventral side, without setae. Ratios of length of fore tibia to lengths of segments of fore tarsus (from 1 to 5) as 6.5 : 2.9 : 1.4 : 1.2 : 0.7 : 1.0. Mid femur with short anteroventral and posteroventral hairs. Mid tibia with three anterodorsal and three posterodorsal setae. Segments of mid tarsus with small setae. Segment 5 of mid tarsus widened. Ratios of length of mid tibia to lengths of segments of mid tarsus (from 1 to 5) as 7.8 : 4.2 : 1.4 : 1.8 : 0.9 : 1.3. Hind femur with long black anterodorsal, anteroventral and posteroventral setae. Hind tibia with four anterodorsal, five posterodorsal and 13–14 ventral setae. Segments of mid tarsus with short setae. Ratios of length of hind tibia to lengths of segments of hind tarsus (from 1 to 5) as 10.9 : 3.0 : 2.3 : 1.4 : 1.2 : 1.4.

Wing darkened, more intensely at *dm-cu* and at bend of *M*. R_{4+5} and *M* slightly diverging. *M* slightly curved. Ratio of costal section between R_{2+3} and R_{4+5} to that between



Figs 1–4. *Thinophilus sinclairi* **sp. nov. 1**, hypopygium (lateral view); **2**, aedeagus (lateral view); **3**, hypopygium (ventral view); **4**, aedeagus (ventral view); **5**, surstylus (lateral view). Scale bar: 0.5 mm.

R_{4+5} and *M* as 2.2 : 1.4. Apical part of CuA_1 longer than *dm-cu*; their ratio as 3.1: 2.0. Anal angle obtuse. Cilia of lower calypter yellow with white hairs. Halter yellow.

Abdomen metallic green, with bronze band on tergal margins, black hairs and grey pollinosity laterally. Epandrium narrow, more narrowed apically. Hypandrium wide, oval. Aedeagus annular curved.

Female. Similar to male. Fore tarsi without long setae.

Comparison. In the key to Palearctic species (Negrobov, 1979), the new species runs to *Thinophilus spinitarsis* Becker, 1907 (couplet 14), but can be distinguished by the structure of the hypopygium. The new species differs from the latter in the following characters, to modify couplet 14 in Negrobov (1979):

14. Fore tibia with two long black dorsal setae at apex. Segments 2–3 of fore tarsus with short black setae, segment 4 with one long black seta. Wings with a dark spot on bend of *M*. Dorsal part of surstylus bent at apex ..... ***T. spinitarsis***

14a. Fore tibia without long black dorsal setae at apex. Segments 2–4 of fore tarsus each with one long black seta. Wings without dark spot on bend of *M*. Dorsal part of surstylus straight ..... ***T. sinclairi* sp. nov.**

Etymology. The species is named in honour of the famous Canadian dipterologist Dr. Bradley Sinclair.

REFERENCES

Grichanov I.Ya. 2017. Alphabetic list of generic and specific names of predatory flies of the epifamily Dolichopodidae (Diptera). Second

edition. *Plant Protection News,* Supplement **23**: 1–563.

McAlpine J.F. 1981. 2. Morphology and terminology – adults. *In*: **McAlpine J.F., Peterson B.V., Shewell G.E., Teskey H.J., Vockeroth J.R. & Wood D.M.** (Coords.). *Manual of Nearctic Diptera, Volume 1. Agriculture Canada Monograph*, **27**: 9–63.

Negrobov O.P. 1971. Revision of Palaearctic species of the genus *Thinophilus* Whlbg. (Diptera, Dolichopodidae). *Entomologicheskoe Obozrenie*, **50**(4): 896–910. (In Russian; English translation: *Entomological Review*, 1971, **50**(4): 511–519).

Negrobov O.P. 1976. New and little-known species of the family Dolichopodidae of the fauna of the USSR and adjacent territories. *Nauchnye Doklady Vysshei Shkoly*, *Biologicheskie Nauki*, **8**: 45–50. (In Russian).

Negrobov O.P. 1979. 29. Dolichopodidae. Hydrophorinae. *In*: **Lindner E.** (Ed.). *Die Fliegen der Palaearktischen Region*, **4**(5), Lief. **321**: 419–474, Taf. CLXXIV–LXXXVII, Figs 1422–1659. Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung.

Negrobov O.P. 1980. Contribution to the fauna of the family Dolichopodidae (Diptera) of Ukraine. *Issledovaniya po entomologii i akarologii na Ukraine. Tezisy dokladov 2-go s'ezda Ukrainskogo entomologicheskogo obshchestva* [Entomological and acarological studies in Ukraine. Abstracts of reports at the second congress of the Ukrainian Entomological Society]: 49–50. Uzhgorod. (In Russian).

Negrobov O.P. & Bulli A.F. 1987. Contribution to the study of Dolichopodidae (Diptera) of the fauna of Ukraine. *Tretii s'ezd Ukrainskogo entomologicheskogo obshchestva, Kanev, sentyabr' 1987 g. Tesizy dokladov* [The third congress of the Ukrainian Entomological Society, Kanev, September 1987. Abstracts of reports]: 134–135. Kiev. (In Russian).

Negrobov O.P. & Grichanov I.Ya. 1982. New species of Diptera of the family Dolichopodidae (Diptera) from Tajikistan and Kyrgyzstan. *Novye vidy nasekomykh Srednei Azii* [New insect species from Middle Asia]. *Trudy Zoologicheskogo Instituta AN SSSR*, **110**: 105–108. Leningrad. (In Russian).

Negrobov O.P., Kumazawa T., Tago T. & Maslova O.O. 2014. The species of the genus *Thinophilus* Loew, 1864 (Dolichopodidae, Diptera) of Japan, with description of one new species. *Far Eastern Entomologist*, **281**: 1–6.

Negrobov O.P., Maslova O.O. & Selivanova O.V. 2016. The genus *Thinophilus* Wahlberg, 1844 (Diptera, Dolichopodidae) from Eastern Palaearctic, with description of two new species and new records. *Acta Zoologica Academiae scientiarum Hungaricae*, **62**(2): 143–151.

Yang D. & Li Z. 1998. Diptera: Dolichopodidae. *In*: **Wu H.** (Ed.). *Insects of Longwangshan Nature Reserve*: 318–323. Beijing: China Forestry Publishing House. (In Chinese with English summary).

Received 25 Apr. 2017 / Accepted 25 Oct. 2017

Editorial responsibility: A.A. Przhiboro