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A NEW SPECIES OF *CHRYSOTUS* MEIGEN, 1824 (DIPTERA, DOLICHOPODIDAE) FROM CAUCASUS

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Chrysotus chandleri Negrobov, Naglis et Maslova **sp. n.** is described from North Caucasus. The new species is similar to *Ch. blepharosceles* Kowarz, 1874, but differs by the color of the halteres, by the lacking of long hairs on the fore tibia, and by the shape of the aedeagus.

KEY WORDS: Diptera, Dolichopodidae, *Chrysotus*, new species, Caucasus, Russia.

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С Северного Кавказа описан *Chrysotus chandleri* Negrobov, Naglis et Maslova **sp. n.** Новый вид сходен с *Ch. blepharosceles* Kowarz, 1874, но отличается от последнего окраской жужжальцев, отсутствием длинных щетинок на передних голених и формой эдеагуса.

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INTRODUCTION

The genus *Chrysotus* Meigen, 1824 comprises more than 335 species. The species of this genus are similar in external morphology and have a relatively small number of diagnostic characters, but most species are well distinguished by the structure of the male genitalia, particularly the structure of the aedeagus.

The Palaearctic species of *Chrysotus* were revised by Negrobov and his co-workers in a series of publications (Negrobov, 1980; Negrobov & Maslova, 1995; Negrobov *et al.*, 2000, 2003). Later *Ch. bifurcatus* Wang et Yang, 2009, *Ch. brevicercus* Wang et Yang, 2009, *Ch. luoyangensis* Wang et Yang, 2009, *Ch. sinuolatus* Wang et Yang, 2009, *Ch. xinjiangensis* Wang et Yang, 2009, *Ch. beijingensis* Wang et Yang, 2006, *Ch. serratus* Wang et Yang, 2006, *Ch. thornpenis* Liu, Wang et Yang, 2015, *Ch. shanxiensis* Liu, Wang et Yang, 2015, and *Ch. shanxiensis* Liu, Wang et Yang, 2015 were described from China (Wang & Yang, 2006, 2008, 2009; Wei & Yang, 2007; Liu *et al.*, 2015). Five species were described from Russia, namely *Ch. chukotkensis* Grichanov, 2012 from Chukotka, *Ch. brooksi* Negrobov, Barkalov et Selivanova, 2013 from Primorskii krai, *Ch. cilitibia* Maslova et Negrobov, 2015 from Sakhalin and Kuril Islands, *Ch. komovi* Negrobov, Barkalov et Selivanova, 2014 and *Ch. tricaudatus* Negrobov, Barkalov et Selivanova, 2014 from Taimyr (Grichanov, 2012; Negrobov *et al.*, 2013, 2014; Maslova & Negrobov, 2015). Naglis (2010) described *Ch. dischmaensis* Naglis, 2010 from Switzerland. *Ch. tagoi* Negrobov, Maslova et Fursov, 2015 and *Ch. saigusai* Negrobov, Fursov, Kumazawa et Tago, 2015 are described from Japan (Negrobov *et al.*, 2015). Thus, 82 species of *Chrysotus* are recorded from the Palaearctic Region. Negrobov *et al.* (2000) published the last key to males of the Palaearctic species. A key to males of the Chinese species was published by Yang *et al.* (2011).

Up to now 13 species of *Chrysotus* are known from Caucasus: *Ch. collini* Parent, 1923 from North Caucasus (Grichanov *et al.*, 2006), *Ch. laesus* (Wiedemann, 1817), *Ch. angulicornis* Kowarz, 1874, *Ch. pennatus* Lichtwardt, 1902 from Krasnodar Territory (Negrobov, 1965; Maslova *et al.*, 2007), *Ch. cilipes* Meigen, 1824, *Ch. cupreus* Macquart, 1824, *Ch. defensus* Negrobov et Maslova, 2000, *Ch. femoratus* Zetterstedt, 1843, *Ch. gramineus* (Fallen, 1823), *Ch. neglectus* (Wiedemann, 1817), *Ch. peculiariter* Negrobov et Maslova, 2000, *Ch. pulchellus* Kowarz, 1874, and *Ch. suavis* Loew, 1857 from the Caucasian State Biosphere Reserve (Negrobov, 1967; Negrobov *et al.*, 2000; Grichanov, 2007). One new species from Caucasus is described below. Holotype and paratype of the new species are deposited in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN).

DESCRIPTION OF THE NEW SPECIES

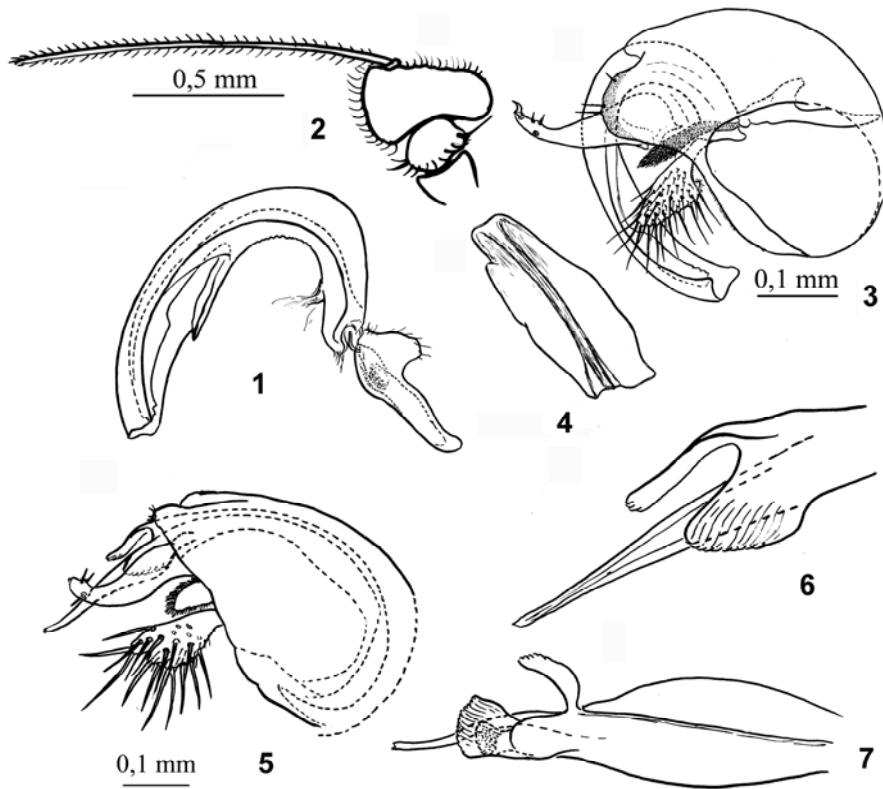
***Chrysotus chandleri* Negrobov, Naglis et Maslova, sp. n.**

Figs 1–4

MATERIAL. Holotype – ♂, **Russia:** “Mountain Dzhuga, Kuban oblast, Moykopskoe otdelenie” (=Krasnodar region: Tuapse district, Mt. Dzhubga), 17.VI 1911, coll. Volnuhin (ZIN). Paratype: 1 ♂, same data as holotype (ZIN).

DESCRIPTION. Male. Frons metallic green, with gray pollen. Face dark, with brown pollen, its width is less the distance between ocellar setae. Antennae black, postpedicel large, transversely oval. Palps brown. Legs black with black setae. Mid tibia with 2 long anterodorsal bristles. Hind tibia with long setae on the outer side. Wings no darkened. Halteres dark. Fore tibia without long hairs.

Head. Frons metallic green, with gray pollen. Face dark, with brown pollen, its width is less the distance between ocellar setae, its width in the middle is about twice less than the length of the postpedicel (0.2: 0.4). Antennae black, postpedicel large, transversely oval, with short hairs. Width of postpedicel longer than its length (0.9: 0.4). Stylus subapical, with short hairs, much longer than postpedicel (0.4: 2.6). Palps brown, with black hairs. Lower postoculars white.



Figs. 1-7. *Chrysotus* spp. 1-4 - *C. chandleri*, sp. n.: 1 - aedeagus, lateral view, 2 - antenna, 3 - hypopygium, lateral view, 4 - aedeagus, dorsal view; 5-7 - *C. blepharosceles* Kowarz; 5 - hypopygium, lateral view, 6 - apical part of aedeagus, lateral view, 7 - aedeagus, dorsal view.

Thorax. Shining green, weakly grey pollinose; pleura grey pollinose. Mesonotum shiny green with violet shade. 6 pairs of strong dorsocentral bristles. Proepisternum with black setae. Acrostichals biseriate, well developed. Scutellum with a pair of strong medial scutellars. Legs black with black setae. Fore coxae with black setae. Fore femur with short anteroventral hairs. Fore tibia with 2 strong anterodorsal setae, its length is shorter than the diameter of the tibia. Fore tarsus without short hairs. Mid femur with few short anteroventral bristles. Mid tibia with 2 long anterodorsal bristles. Mid tarsus without short hairs. Hind femur with long anteroventral bristles, its length is more than half the width of the femur. Hind tibia with 2 long anterodorsal and 2 posterodorsal bristles, and with long setae on the outer side which are not longer than the diameter of the tibia, and with a number of short black bristles on the ventral side. Hind tarsus with short hairs. Podomeres (from tibia to fifth tarsomere) length ratio: fore leg: 3.3: 1.7: 0.8: 0.6: 0.4: 0.3, mid leg 5.0: 2.0: 0.9: 0.6: 0.5: 0.4, hind leg 4.5: 1.4: 1.0: 0.7: 0.5 : 0.4.

Wings. Membrane no darkened; veins dark; R_{4+5} and M_{1+2} parallel at the apex; costal section between R_{2+3} and R_{4+5} about twice as long as the costal section between R_{4+5} and M_{1+2} (1.9: 0.9); distal section of M_{1+2} longer than basal section (5.7: 3.5); ratio of cross-vein dm-cu to distal part of CuA_1 0.9: 2.8; lower calypter with black cilia; halter black.

Abdomen. Metallic green, grey pollinose, covered with black hairs; epandrium nearly circular; surstylus narrow, curved ventrally at apex, with setae in apical part. Aedeagus without appendages. Cerci oval with fine black bristles.

Female unknown.

MEASUREMENTS. Body length 1.8–2.2 mm, wing length 1.9 mm.

ETYMOLOGY. The new species is named after the English dipterologist Peter Chandler.

COMPARISON. According to the key to the Palearctic species of the genus *Chrysotus* (Negrobov *et al.*, 2000), the new species is keyed to *Ch. blepharosceles*, but differs by the following characters:

- 1(2) Halteres dark. Fore tibia without long hairs. Hypopygium – Fig. 3. Aedeagus at the apex without lateral processes (Figs 1, 4) *Chrysotus chandleri* **sp. n.**
2(1) Halteres yellow. Fore tibia with long dorsal and ventral hairs, longest hairs longer than the diameter of the tibia. Hypopygium – Fig. 5. Aedeagus at the apex with 2 lateral processes (Figs 6, 7) *Ch. blepharosceles* Kowarz, 1874

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