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New faunistic data on Dolichopodidae (Diptera) from Turkey

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Abstract. Faunistic data is given for 83 species of Dolichopodidae from Turkey. The following genera are recorded for the first time in Turkey: *Achalculus* Loew, 1857, *Cyrturella* Collin, 1952, and *Trigonocera* Becker, 1902; 21 species are recorded for the first time in Turkey: *Achalculus flavicollis* (Meigen, 1824), *Aphrosylus venator* Loew, 1857, *Asyndetus separatus* (Becker, 1902), *Chrysotus larachensis* Grichanov, Nourti et Kettani, 2020, *Cyrturella albosetosa* (Strobl, 1909), *Hydrophorus bipunctatus* (Lehmann, 1822), *Lamprochromus bifasciatus* (Macquart, 1827), *Lamprochromus kowarzi* Negrobov et Tshalaja, 1988, *Medetera petrophiloides* Parent, 1925, *M. signaticornis* Loew, 1957, *Orthoceratium sabulosum* (Becker, 1907), *Rhaphium antennatum* (Carlier, 1835), *Sciapus bellus* (Loew, 1873), *S. euchromus* (Loew, 1857), *S. longulus* (Fallén, 1823), *S. tenuinervis* (Loew, 1857), *Syntormon triangulipes* Becker, 1902, *Teuchophorus calcaratus* (Macquart, 1828), *Thinophilus quadrimaculatus* Becker, 1902, *Trigonocera rivosus* Becker, 1902, *Xanthochlorus silaceus* Chandler et Negrobov, 2008.

Key words: Dolichopodidae, long-legged flies, faunistics, new record, distribution, Turkey.

Новые данные по фауне Dolichopodidae (Diptera) Турции

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Abstract. Приведены фаунистические данные по 83 видам Dolichopodidae Турции. Роды *Achalculus* Loew, 1857, *Cyrturella* Collin, 1952 и *Trigonocera* Becker, 1902 зарегистрированы в стране впервые; 21 вид указан для Турции в первый раз: *Achalculus flavicollis* (Meigen, 1824), *Aphrosylus venator* Loew, 1857, *Asyndetus separatus* (Becker, 1902), *Chrysotus larachensis* Grichanov, Nourti et Kettani, 2020, *Cyrturella albosetosa* (Strobl, 1909), *Hydrophorus bipunctatus* (Lehmann, 1822), *Lamprochromus bifasciatus* (Macquart, 1827), *Lamprochromus kowarzi* Negrobov et Tshalaja, 1988, *Medetera petrophiloides* Parent, 1925, *M. signaticornis* Loew, 1957, *Orthoceratium sabulosum* (Becker, 1907), *Rhaphium antennatum* (Carlier, 1835), *Sciapus bellus* (Loew, 1873), *S. euchromus* (Loew, 1857), *S. longulus* (Fallén, 1823), *S. tenuinervis* (Loew, 1857), *Syntormon triangulipes* Becker, 1902, *Teuchophorus calcaratus* (Macquart, 1828), *Thinophilus quadrimaculatus* Becker, 1902, *Trigonocera rivosus* Becker, 1902, *Xanthochlorus silaceus* Chandler et Negrobov, 2008.

Key words: Dolichopodidae, фауна, новые указания, распространение, Турция.

Introduction

The Dolichopodidae, or long-legged flies, are small to medium sized flies of slender built with a body length of 1–12 mm. Most species have a conspicuous metallic green shiny body and relatively long legs. It is a large family of Diptera comprising some 7400 described species occurring in all biogeographical regions [Pape et al., 2011]. In Europe more than 800 species and subspecies are recorded [Pollet, 2013]. Adults are predators on soft-bodied invertebrates and some are important control agents of pest species. The larvae are found in habitats such as soil, mud, and under bark, and some genera, as for example *Medetera* Fischer von Waldheim, 1819, are known as predators of bark beetles.

The long-legged flies of Turkey are not well known. Therefore, it is not surprising that in the last decade several new species were described from Turkey [Naglis, 2009, 2010, 2011, 2012, 2013; Grichanov, 2012; Tonguç, Grootaert,

2013; Grichanov, Kazerani, 2014]. In the recent checklist [Tonguç et al., 2016a] 187 species are listed. Several new species and first records were added for the country after 2016 by some authors [Tonguç et al., 2016b; Küçükberber et al., 2017; Grichanov, Ahmadi, 2017; Naglis, Negrobov, 2017; Kechev et al., 2020]. But many new records and even new species may be discovered by intensive, specifically targeted collecting activities.

In this paper faunistic data for 83 species of Dolichopodidae from Turkey are given, 3 genera and 21 species are recorded for the first time in Turkey. As a result, the number of dolichopodid species in Turkey has increased to 220.

Material and methods

The material treated in this paper originates mainly from several collecting trips to Turkey organized by the third author together with Š. Kubík. The material was

collected by means of sweeping, Malaise traps or yellow and white water pan traps. The collectors of the most specimens are M. Barták and Š. Kubík, except as noted. Additional material was collected by the late W. Schacht (Germany).

Abbreviations used in the text: SW – net sweeping; PT – pan trap; YWPT – yellow water pan trap; MT – malaise trap.

List of localities, exact coordinates, and collectors are given below:

2011:

Muğla Prov., Ula, Akyaka, river bank + salty meadow, 37°03'16"N / 28°19'57"E, 16–27.05 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, forest, 37°03'21"N / 28°19'09"E, 40 m, SW + PT, 16–27.05 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'42"N / 28°22'21"E, 700 m, SW + PT, 17–22.05 (M. Barták, Š. Kubík);

Muğla Prov., 15 km SW of Muğla, Menteşe, damp valley near brook, 37°06'31"N / 28°15'31"E, 630 m, 23.05 (M. Barták, Š. Kubík).

2012:

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 645 m, 37°09'42"N / 28°22'21"E, PT, 8.06 (O. Dursun);

Muğla Prov., Ula, Akyaka, pasture, 37°03'09"N / 28°20'17"E, 4 m, 16–22.09 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, meadow, 37°03'N / 28°20'E, Barták, Kubík, 16–27.09 (M. Barták, Š. Kubík);

Muğla Prov., Köyceğiz, Gökçeova Lake shore, 37°03'42.52"N / 28°48'28.42"E, 1750 m, 20.09 (M. Barták, Š. Kubík);

Aydın Prov., 8 km S of Çine, river bank, 37°32'34"N / 28°03'46"E, 68 m, 21.09 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'42"N / 28°22'21"E, 700 m, PT, 21–24.09 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, pasture, 37°03'09"N / 28°20'17"E, 4 m, 23–27.09 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, salty meadow, 37°03'N / 28°20'E, 2 m, 23–27.09 (M. Barták, Š. Kubík).

2013:

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, edge of pine wood, 37°09'41"N / 28°22'21"E, 700 m, protein trap, 11.2012–03.2013 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, edge of pine wood + Quercus shrubs, 37°09'39"N / 28°22'20"E, 710 m, Malaise trap, 11.2012–03.2013 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, pasture, 37°03'19"N / 28°20'07"E, 6 m, 28.04–8.05 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, salty meadow, 37°02'53"N / 28°19'39"E, SW + PT, 28.04–9.05 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'42"N / 28°22'21"E, 700 m, SW + PT, 29.04–10.05 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, forest, 37°03'16"N / 28°19'35"E, 30 m, 30.04–9.05 (M. Barták, Š. Kubík);

Muğla Prov., 11 km E of Muğla, Menteşe, pine wood + meadow, 37°12'45"N / 28°27'42"E, 1310 m, 1.05 (M. Barták, Š. Kubík);

Aydın Prov., 9 km S of Çine, river bank, 37°31'36"N / 28°04'29"E, 70 m, 2.05 (M. Barták, Š. Kubík);

Muğla Prov., Köyceğiz, Toparlar, lowland forest, 36°58'39"N / 28°39'30"E, sweeping, 5–7.05 (M. Barták, Š. Kubík);

Muğla Prov., 5 km S of Muğla, Menteşe, edge of pine wood, 37°08'27"N / 28°22'05"E, 670 m, on flowers, 6.05 (M. Barták, Š. Kubík).

2014:

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'42"N / 28°22'22"E, 700 m, 04–05.2014 (O. Dursun);

Samsun, university campus, 41°22'N / 36°11'E, 22.06–4.07 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, pasture, 37°03'09"N / 28°20'17"E, 4 m, 8–14.09 (M. Barták, Š. Kubík);

Aydın Prov., 8 km S of Çine, river bank, 37°32'34"N / 28°03'46"E, 68 m, 10–12.09 (M. Barták, Š. Kubík);

Muğla Prov., Köyceğiz, Toparlar, lowland forest, 36°59'27"N / 28°38'50"E, 8 m, 11.09 (M. Barták, Š. Kubík).

2015:

Muğla, university campus, 37°09'42"N / 28°22'13"E, 720 m, MT, January – May and 26.05–26.06 (H. Kavak);

Muğla Prov., Köyceğiz, Toparlar, lowland forest, 36°59'27"N / 28°38'50"E, 8 m, SW, 22–24.06 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, salty meadow, 37°01'49"N / 28°20'01"E, 2 m, 22.06–1.07 (M. Barták, Š. Kubík);

Muğla Prov., 13 km NE of Muğla, Menteşe, pasture + pine wood, 37°14'50"N / 28°30'E, 1200 m, 23–27.06 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'42"N / 28°22'13"E, 720 m, YWPT, 26–27.06 (M. Barták, Š. Kubík);

Aydın Prov., 8 km S of Çine, river bank, 37°32'34"N / 28°03'46"E, 68 m, SW + YWPT, 28–30.06 (M. Barták, Š. Kubík);

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'38"N / 28°22'11"E, 730 m, MT, 5–19.08 (H. Kavak);

Muğla Prov., Ortaca, Dalyan, farm, 36°48'54"N / 28°39'04"E, 1 m, MT, 8–20.08 (O. Dursun).

2016:

Muğla Prov., Menteşe, Muğla Sıtkı Koçman University campus, 37°09'38"N / 28°22'11"E, 730 m, MT, 11.2015–04.2016 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, forest, 37°03'19"N / 28°19'36"E, 40 m, SW, 26.04 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Akyaka, salty meadow, 37°01'52"N / 28°20'00"E, 2 m, PT, 27.04–1.05 (M. Barták, Š. Kubík);

Muğla Prov., Ula, Kızılyaka, 37°01'21"N / 28°26'18"E, 105 m, on flowers, 27.04–4.05 (M. Barták, Š. Kubík);

Muğla Prov., Köyceğiz, Toparlar, lowland forest, 36°59'27"N / 28°38'50"E, 8 m, SW + PT, 28–30.04 (M. Barták, Š. Kubík);

Muğla Prov., Ortaca, Dalyan, salty meadow, 36°47'49"N / 28°38'55"E, PT, 28–30.04 (M. Barták, Š. Kubík);

Aydın Prov., 8 km S of Çine, river bank, 37°32'34"N / 28°03'46"E, 68 m, PT + SW, 29.04–1.05 (M. Barták, Š. Kubík);

Muğla Prov., 13 km NE of Muğla, Menteşe, pine wood + pasture, 37°15'N / 28°30'E, 1100–1300 m, 2–3.05 (M. Barták, Š. Kubík).

The material examined is deposited in the collection of the Czech University of Life Sciences Prague, except some specimens deposited in the private collection of the first author. Distribution data for Turkey are taken from Tonguç et al. [2016a] and Küçükberber et al. [2017] if not otherwise indicated. The subfamilies, genera and species are listed in alphabetical order.

Subfamily Achalcinae

Achalcus flavicollis (Meigen, 1824)

Material. Muğla, Ula, Akyaka: 1♂, 23–27.09.2012.

Note. New genus and first record for Turkey.

Subfamily Diaphorinae

Argyra argyria (Meigen, 1824)

Material. Muğla, Köyceğiz, Toparlar: 1♂, 5–7.05.2013; 1♂, 28–30.04.2016.

Note. Recorded for Turkey from Kütahya, Uşak, Afyonkarahisar provinces. The two similar species, *A. argyria* and *A. leucocephala*, are here identified based on their coloration of the legs, e.g. mainly black femora = *A. argyria*; mainly yellow femora = *A. leucocephala*.

Argyra leucocephala (Meigen, 1824)

Material. Muğla, Ula, Akyaka: 1♂, 23–27.09.2012; 3♂, 16–22.09.2012. Muğla, Köyceğiz, Toparlar: 1♂, 22–24.06.2015.

Note. Recorded for Turkey from Antalya and Adıyaman provinces.

Argyra vestita (Wiedemann, 1817)

Material. Muğla, Ula, Akyaka: 2♂, 16–27.05.2011.

Note. Recorded for Turkey from Kars and Van provinces.

Asyndetus latifrons (Loew, 1857)

Material. Aydın, Çine: 4♂, 10–12.09.2014; 3♂, 28–30.06.2015. Muğla, Ortaca, Dalyan: 1♂, 8–20.08.2015.

Note. Recorded for Turkey from Aydın, Denizli, Muğla, Sakarya and Zonguldak provinces.

Asyndetus separatus (Becker, 1902)

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011; 2♂, 16–27.09.2012; 2♂, 23–27.09.2012; 2♂, 13–14.09.2014; 2♂, 22.06–1.07.2015. Muğla, Ortaca, Dalyan: 5♂, 1♀, 28–30.04.2016.

Note. First record for Turkey.

Chrysotus larachensis Grichanov, Nourti et Kettani, 2020

Material. Samsun: 1♂, 22.06–4.07.2014. Muğla: 1♂, 23–27.06.2015.

Note. The species was recently described from Morocco. First record for Turkey.

Chrysotus dorli Negrobov, 1980

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011; 2♂, 23–27.09.2012; 1♂, 28.04–8.05.2013; 1♂, 22.06–1.07.2015.

Note. Recorded for Turkey from Konya and Adıyaman provinces. A key for the separation of *Ch. dorli* and *Ch. suavis* was provided by Naglis [2010].

Chrysotus suavis (Loew, 1857)

Material. Muğla, Ula, Akyaka: 2♂, 16–27.05.2011; 1♂, 16–22.09.2012; 1♂, 28.04–8.05.2013; 1♂, 8–14.09.2014; 3♂, 22.06–1.07.2015. Aydın, Çine: 1♂, 21.09.2012; 2♂, 10–12.09.2014; 2♂, 28–30.06.2015; 3♂, 29.04–1.05.2016. Muğla, Köyceğiz, Gökçeova Lake: 1♂, 20.09.2012. Muğla, Köyceğiz, Toparlar: 2♂, 22–24.06.2015.

Note. Recorded for Turkey from Antalya, Antakya, Gaziantep, Adıyaman, Şanlıurfa and Artvin provinces.

Diaphorus hoffmannseggi Meigen, 1830

Material. Samsun: 7♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Zonguldak Province.

Diaphorus winthemi Meigen, 1824

Material. Muğla, Köyceğiz, Toparlar: 2♂, 5–7.05.2013.

Note. Recorded for Turkey from Zonguldak Province.

Trigonocera rivososa Becker, 1902

Material. Muğla, Ula, Akyaka: 1♂, 23–27.09.2012. Muğla, Köyceğiz, Toparlar: 1♂, 11.09.2014; 1♂, 22–24.06.2015.

Note. *Trigonocera rivososa* shows a widespread distribution in the Afrotropical and Oriental regions. In the Palearctic region the species is only known from Egypt and Israel, thus the locality recorded here is the northernmost distribution within the Palearctic. New genus and first record for Turkey.

Subfamily Dolichopodinae

Dolichopus diadema Haliday, 1832

Material. Muğla, Ula, Akyaka: 6♂, 16–27.05.2011; 3♂, 23–27.09.2012; 3♂, 28.04–9.05.2013; 1♂, 13–14.09.2014; 3♂, 27.04–1.05.2016. Muğla, Ortaca, Dalyan: 5♂, 28–30.04.2016.

Note. Recorded for Turkey from Muğla Province. The species is treated by some authors in the subgenus *Macrodolichopus*.

Dolichopus excisus Loew, 1859

Material. Muğla, Ula, Akyaka: 1♂, 16–22.09.2012; 1♂, 23–27.09.2012.

Note. Recorded for Turkey from Muğla, Burdur, Antalya provinces.

Dolichopus griseipennis Stannius, 1831

Material. Muğla, Köyceğiz, Toparlar: 4♂, 5–7.05.2013; 6♂, 11.09.2014; 3♂, 22–24.06.2015; 2♂, 28–30.04.2016. Samsun: 3♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Muğla, Burdur, Sinop provinces, Anatolia.

Dolichopus latilimbatus Macquart, 1827

Material. Muğla, Ula, Akyaka: 1♂, 28.04–8.05.2013; 1♂, 13–14.09.2014; 1♂, 22.06–1.07.2015.

Note. Recorded for Turkey from İzmit.

Dolichopus nubilus Meigen, 1824

Material. Samsun: 1♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Kırklareli Province.

Dolichopus sabinus Haliday, 1838

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011; 1♂, 16–22.09.2012; 5♂, 23–27.09.2012; 1♂, 28.04–8.05.2013; 1♂, 27.04.2016.

Note. Recorded for Turkey from Antalya Province.

Dolichopus signifer Haliday, 1838

Material. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 11.2012–03.2013. Muğla, Köyceğiz, Toparlar: 2♂, 22–24.06.2015.

Note. Recorded for Turkey from Manisa and Burdur provinces.

Dolichopus strigipes Verall, 1875

Material. Muğla, Ula, Akyaka: 3♂, 16–27.05.2011; 3♂, 23–27.09.2012; 8♂, 28.04–9.05.2013; 11♂, 22.06–1.07.2015; 5♂, 27.04–1.05.2016. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 5–19.08.2015. Muğla, Ortaca, Dalyan: 9♂, 28–30.04.2016.

Note. Recorded for Turkey from Artvin Province.

Gymnopternus blankaartensis (Pollet, 1990)

Material. Muğla, Ula, Akyaka: 2♂, 16–27.05.2011. Muğla, Köyceğiz, Toparlar: 1♂, 28–30.04.2016.

Note. Recorded for Turkey from Adıyaman Province.

Hercostomus chetifer (Walker, 1849)

Material. Samsun: 11♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Manisa and Antalya provinces.

Hercostomus convergens Loew, 1857

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011; 7♂, 16–22.09.2012; 3♂, 23–27.09.2012; 2♂, 28.04–8.05.2013; 4♂, 28.04–9.05.2013; 5♂, 13–14.09.2014; 4♂, 27.04–1.05.2016. Muğla, Köyceğiz, Toparlar: 1♂, 11.09.2014; 2♂, 22–24.06.2015; 1♂, 28–30.04.2016.

Note. Recorded for Turkey from Muğla and Kars provinces.

Hercostomus longiventris (Loew, 1857)

Material. Muğla, Menteşe: 1♂, 23.05.2011.

Note. Recorded for Turkey from Muğla and Artvin provinces.

Hercostomus nanus Macquart, 1827

Material. Muğla, Ula, Akyaka: 1♂, 27.04–1.05.2016; Muğla, Köyceğiz, Toparlar: 16♂, 28–30.04.2016.

Note. Recorded for Turkey from Muğla Province.

Hercostomus thraciensis Kechev et Negrobov, 2015

Material. Muğla, Köyceğiz, Toparlar: 3♂, 28–30.04.2016.

Note. Recorded for Turkey from Manisa Province.

Ortochile nigrocoerulea Latreille, 1809

= *Ortochile unicolor* Loew, 1850.

Material. Muğla, Ula, Akyaka: 1♂, 28.04–8.05.2013; 2♀, 27.04–1.05.2016. Muğla, Ula, Kızılyaka: 1♂, 27.04–4.05.2016. 7♂, 2–3.05.2016. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 12♂, 17–22.05.2011; 4♂, 2♀, 29.04–10.05.2013; 1♂, 04–05.2014. Muğla, Menteşe: 7♂, 2–3.05.2016.

Note. Recorded for Turkey from İzmir and Aydın provinces.

Poecilobothrus principalis (Loew, 1861)

Material. Muğla, Ula, Akyaka: 1♂, 16–22.09.2012; 10♂, 23–27.09.2012.

Note. Recorded for Turkey from Kütahya Province.

Sybistroma impar (Rondani, 1843)

Material. Samsun: 2♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Antalya and Adıyaman provinces.

Sybistroma lorifer (Mik, 1878)

Material. Muğla, Menteşe: 1♂, 2–3.05.2016.

Note. Recorded for Turkey from Manisa and Uşak provinces.

Sybistroma nodicornis Meigen, 1824

Material. Muğla, Köyceğiz, Toparlar: 3♂, 28–30.04.2016.

Note. Recorded for Turkey from Uşak and Afyonkarahisar provinces.

Tachytrechus notatus (Stannius, 1831)

Material. Muğla, Ula, Akyaka: 2♂, 23–27.09.2012; 1♂, 22.06–1.07.2015. Muğla, Köyceğiz, Toparlar: 1♂, 22–24.06.2015. Aydın, Çine: 1♂, 29.04–1.05.2016. Samsun: 1♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Aydın, Muğla and Sakarya provinces.

Tachytrechus ripicola Loew, 1857

Material. Aydın, Çine: 1♂, 21.09.2012; 1♂, 2.05.2013; 3♂, 10–12.09.2014; 2♂, 28–30.06.2015.

Note. Recorded for Turkey from Antalya Province.

Tachytrechus tessellatus (Macquart, 1842)

= *Tachytrechus salinarius* Becker, 1902.

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011.

Note. Recorded for Turkey from Antalya Province.

Subfamily Hydrophorinae*Aphrosylus venator* Loew, 1857

Material. Muğla, Ula, Akyaka: 2♂, 2♀, 16–27.05.2011; 1♀, 28.04–9.05.2013.

Note. First record for Turkey.

Hydrophorus balticus (Meigen, 1824)

Material. Muğla, Ula, Akyaka: 1♂, 28.04–8.05.2013. Muğla, Köyceğiz, Gökçeova Lake: 1♂, 20.09.2012. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 29.04–10.05.2013; 2♂, 2–3.05.2016.

Note. Recorded for Turkey from Manisa, Aydın, Denizli, Muğla, Isparta, Antalya, Rize, Kars provinces.

Hydrophorus bipunctatus (Lehmann, 1822)

Material. 1♀, İstanbul, Şile, Yaylalı Village, 41°05'N / 29°40'E, 180 m, 18.05.2010 (A. Tonguç).

Note. First record for Turkey.

Hydrophorus praecox (Lehmann, 1822)

Material. Muğla, Ula, Akyaka: 3♂, 16–27.05.2011; 1♂, 16–22.09.2012; 8♂, 28.04–9.05.2013; 1♂, 27.04–1.05.2016. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 29.04–10.05.2013.

Note. Recorded for Turkey from Bolu and Antalya provinces.

Liancalus virens (Scopoli, 1763)

Material. Muğla, Köyceğiz, Gökçeova Lake: 1♂, 20.09.2012.

Note. Recorded for Turkey from Manisa, Muğla, Hakkari provinces.

Orthoceratium sabulosum (Becker, 1907)

Material. Muğla, Ula, Akyaka: 1♀, 26.04.2016; 1♂, 27.04–1.05.2016.

Note. First record for Turkey. The specimens recorded from Afyonkarahisar and Kütahya provinces should be checked.

Thinophilus flavipalpis (Zetterstedt, 1843)

Material. Muğla, Ula, Akyaka: 3♂, 28.04–9.05.2013; 3♂, 27.06–1.05.2016. Muğla, Ortaca, Dalyan: 6♂, 28–30.04.2016.

Note. Recorded for Turkey from Ankara Province.

Thinophilus quadrimaculatus Becker, 1902

Material. Muğla, Ula, Akyaka: 1♂, 1♀, 27.04–1.05.2016.

Note. First record for Turkey.

Subfamily Medeterinae*Cyrturella albosetosa* (Strobl, 1909)

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011.

Note. New genus and first record for Turkey.

Medetera flavipes Meigen, 1824

Material. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 11.2012–03.2013.

Note. Recorded for Turkey from İzmir, Aydın, Muğla, Antalya, Adıyaman provinces.

Medetera pallipes (Zetterstedt, 1843)

Material. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 3♂, 05.2015; 3♂, 11.2015–04.2016.

Note. Recorded for Turkey from Antalya, Kars, Hakkari provinces.

Medetera petrophiloides Parent, 1925

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 6♂, 17–22.05.2011; 1♂, 21–24.09.2012; 2♂, 11.2012–03.2013; 5♂, 29.04–10.05.2013; 3♂, 26–27.06.2015; 1♂, 11.2015–04.2016. Muğla, Menteşe: 1♂, 23.05.2011; 1♂, 1.05.2013; 3♂, 6.05.2013; 11♂, 23–27.06.2015, 5♂, 2–3.05.2016. Muğla: 1♂, 26.05–26.06.2015. Samsun: 1♂, 22.06–4.07.2014.

Note. First record for Turkey.

Medetera plumbella Meigen, 1824

Material. Aydın, Çine: 1♂, 28–30.06.2015.

Note. Recorded for Turkey from Kars Province.

Medetera signaticornis Loew, 1957

Material. Muğla, Menteşe: 1♂, 23–27.06.2015; 1♂, 2–3.05.2016.

Note. First record for Turkey.

Subfamily Peloroepodinae*Chrysotimus meridionalis* Naglis et Barták, 2015

Material. 30♂, Kars Prov., Aras River valley, W Karakurt, 1300 m, 4.07.1985 (W. Schacht).

Note. Recorded for Turkey but locality was not given [Naglis, Barták, 2015].

Chrysotimus molliculus (Fallén, 1823)

Material. 1♂, Kars Prov., Aras River valley, W Karakurt, 1300 m, 4.07.1985 (W. Schacht).

Note. Recorded for Turkey from Kırklareli Province.

Peloroepodes acuticornis (Oldenberg, 1916)

Material. Samsun: 2♂, 22.06–4.07.2014. Muğla, Köyceğiz, Toparlar: 1♂, 22–24.06.2015.

Note. Recorded for Turkey from Kütahya Province.

Vetimicrotes mediterraneus (Becker, 1918)

Material. Muğla, Ortaca, Dalyan: 11♂, 4♀, 28–30.04.2016. Muğla, Ula, Akyaka: 1♂, 23–27.09.2012; 9♂, 28.04–9.05.2013; 2♂, 22.06–1.07.2015.

Note. Recorded for Turkey from İzmir Province.

Subfamily Rhapsiinae*Rhaphium antennatum* (Carlier, 1835)

Material. Aydın, Çine: 2♂, 29.04–1.05.2016.

Note. First record for Turkey.

Rhaphium appendiculatum Zetterstedt, 1849

Material. 1♂, Adıyaman Prov., Çelik Lake, Gölbaşı, 900 m, 21.06.1985 (W. Schacht). Muğla, Ula, Akyaka: 2♂, 23–27.09.2012. Muğla, Köyceğiz, Toparlar: 2♂, 5–7.05.2013; 1♂, 22–24.06.2015; 1♂, 28–30.04.2016. Aydın, Çine: 1♂, 21.09.2012.

Note. Recorded for Turkey from Manisa, Denizli, Adıyaman provinces.

Rhaphium brevicorne Curtis, 1835

Material. 1♂, Şırnak Prov., Nabur stream valley, S Beytüşşebap, 1200 m, 26.06.1985 (W. Schacht). Muğla, Menteşe: 1♂, 23.05.2011. Muğla, Köyceğiz, Gökçeova Lake: 3♂, 20.09.2012. Muğla, Köyceğiz, Toparlar: 2♂, 5–7.05.2013.

Note. Recorded for Turkey from Manisa and Antalya provinces.

Rhaphium fascipes (Meigen, 1824)

Material. Muğla, Ula, Akyaka: 2♂, 28.04–8.05.2013.

Note. Recorded for Turkey but locality was not given [Negrobov, 1991].

Rhaphium micans (Meigen, 1824)

Material. Aydın, Çine: 1♂, 10–12.09.2014.

Note. Recorded for Turkey from Muğla and Rize provinces.

Subfamily Sciapodinae
Sciapus aberrans Becker, 1918

Material. Muğla, Ula, Akyaka: 4♂, 28.04–9.05.2013; 1♂, 22.06–1.07.2015; 2♂, 27.04–1.05.2016.

Note. Recorded for Turkey from Adana Province.

Sciapus adana Grichanov et Negrobov, 2014

Material. Muğla, Ula, Akyaka: 3♂, 28.04–9.05.2013; 2♂, 22.06–1.07.2015. Muğla, Ortaca, Dalyan: 2♂, 28–30.04.2016.

Note. Recorded for Turkey from Adana Province [Grichanov, Negrobov, 2014].

Sciapus bellus (Loew, 1873)

Material. 1♂, Sakarya Prov., Karasu, Limandere Village, 40°59'N / 30°36'E, 18 m, 3.05.2009 (A. Tonguç).

Note. First record for Turkey.

Sciapus euchromus (Loew, 1857)

Material. Muğla, Ula, Akyaka: 1♂, 28.04–8.05.2013.

Note. First record for Turkey.

Sciapus flavicinctus (Loew, 1857)

Material. Aydın, Çine: 5♂, 29.04–1.05.2016. Muğla, Ula, Akyaka: 1♂, 27.04–1.05.2016.

Note. Recorded for Turkey from İstanbul, Antalya and Adana provinces.

Sciapus litoralis Grichanov et Negrobov, 2014

Material. 1♂, Siirt Prov., Botan River valley, 500 m, 23.06.1985 (W. Schacht). Aydın, Çine: 1♂, 28–30.06.2015.

Note. Recorded for Turkey from Antalya Province [Grichanov, Negrobov, 2014].

Sciapus longulus (Fallén, 1823)

Material. 1♂, Kars Prov., Aras River valley, W Karakurt, 1300 m, 4.07.1985 (W. Schacht). 1♂, Erzurum Prov., pass W Oltu, 2200 m, 6.07.1985 (W. Schacht).

Note. First record for Turkey.

Sciapus tenuinervis (Loew, 1857)

Material. Muğla, Menteşe: 1♂, 1.05.2013. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 1♂, 26–27.06.2015.

Note. First record for Turkey. The hypopygium is very similar to that of *S. longitarsis* Grichanov et Negrobov, 2014, but both species can be separated by the diagnosis given in Grichanov, Negrobov [2014].

Subfamily Sympycninae
Campsicnemus crinitarsis Strobl, 1906

Material. Aydın, Çine: 4♂, 10–12.09.2014. Muğla, Menteşe: 1♂, 23–27.06.2015.

Note. Recorded for Turkey from Uşak Province.

Campsicnemus curvipes (Fallén, 1823)

Material. Muğla, Köyceğiz, Toparlar: 3♂, 5–7.05.2013.

Note. Recorded for Turkey from Manisa, Bolu and Antalya provinces.

Campsicnemus magius (Loew, 1845)

Material. Muğla, Ula, Akyaka: 1♂, 23–27.09.2012.

Note. Recorded for Turkey from Denizli Province.

Campsicnemus simplicissimus Strobl, 1906

Material. Muğla, Ula, Akyaka: 3♂, 16–27.05.2011; 2♂, 28.04–8.05.2013. Muğla, Köyceğiz, Toparlar: 2♂, 22–24.06.2015. Muğla, Menteşe, Muğla Sıtkı Koçman University campus, 1♂, 19.08.2015. Aydın, Çine: 1♂, 29.04–1.05.2016.

Note. Recorded for Turkey from Antalya and Konya provinces.

Campsicnemus umbripennis Loew, 1856

Material. Muğla, Köyceğiz, Gökçeova Lake: 3♂, 20.09.2012. Muğla, Menteşe, 1♂, 23–27.06.2015; 2♂, 2–3.05.2016.

Note. Recorded for Turkey from Manisa, Muğla, Isparta, Erzurum, Kars and Hakkari provinces.

Lamprochromus bifasciatus (Macquart, 1827)

Material. Muğla, Köyceğiz, Toparlar: 1♂, 28–30.04.2016.

Note. First record for Turkey.

Lamprochromus kowarzi Negrobov et Tshalaja, 1988

Material. Muğla, Ula, Akyaka: 1♂, 13–14.09.2014.

Note. First record for Turkey.

Sympycnus simplicipes Becker, 1908

Material. Muğla, Ula, Akyaka: 4♂, 16–22.09.2012. Muğla, Köyceğiz, Toparlar: 1♂, 22–24.06.2015. Aydın, Çine: 2♂, 29.04–1.05.2016.

Note. Recorded for Turkey from Kütahya, Uşak and Afyonkarahisar provinces.

Syntormon denticulatum Zetterstedt, 1843

Material. Muğla, Menteşe, Muğla Sıtkı Koçman University campus: 3♂, 17–22.05.2011. Muğla, Köyceğiz, Toparlar: 1♂, 5–7.05.2013; 3♂, 28–30.04.2016.

Note. Recorded for Turkey from Manisa, Muğla, Erzurum and Van provinces.

Syntormon metathesis (Loew, 1850)

Material. Muğla, Köyceğiz, Toparlar: 1♂, 5–7.05.2013; 1♂, 22–24.06.2015.

Note. Recorded for Turkey but locality was not given.

The specimens show a striking yellow lateral spot on abdominal segments 2 and 3; otherwise they match with the species description in Parent [1938].

Syntormon mikii Strobl, 1899

Material. Muğla, Ula, Akyaka: 1♂, 27.04–1.05.2016.

Note. Recorded for Turkey from Manisa Province.

Syntormon pallipes (Fabricius, 1794)

= *Syntormon pseudospicatum* Strobl, 1899.

Material. Muğla, Ula, Akyaka: 1♂, 16–27.05.2011; 1♂, 28.04–8.05.2013; 4♂, 28.04–9.05.2013; 2♂, 27.04–1.05.2016. Muğla, Menteşe: 1♂, 23.05.2011; 5♂, 23–27.06.2015. Muğla, Menteşe, Muğla Sıtkı Koçman

University campus: 3♂, 8.06.2012; 3♂, 04–05.2014. Muğla, Köyceğiz, Gökçeova Lake: 3♂, 20.09.2012. Samsun: 2♂, 22.06–4.07.2014. Muğla, Köyceğiz, Toparlar: 1♂, 22–24.06.2015; 2♂, 28–30.04.2016. Muğla, Ortaca, Dalyan: 1♂, 28–30.04.2016.

Note. Recorded for Turkey from Manisa, Denizli, Muğla, Burdur, Isparta, Antalya, Ankara, Adıyaman, Van and Hakkari provinces.

Syntormon pseudospicatum was listed as valid species in Negrobov [1991] and in Pollet [2013]. We follow here Grichanov [2013] who regarded *S. pseudospicatum* as variation of *S. pallipes*. The examined material shows a high variation of (1) the coloration and setation of the hind leg, and (2) the extension of the yellow lateral spots on abdominal segments 2 and 3 from absent, slightly indicated to conspicuously present.

Syntormon triangulipes Becker, 1902

Material. Muğla, Ula, Akyaka: 2♂, 16–27.05.2011; 1♂, 28.04–8.05.2013. Muğla, Ortaca, Dalyan: 1♂, 28–30.04.2016.

Note. First record for Turkey.

Teuchophorus bisetus Loew, 1871

Material. Muğla, Köyceğiz, Toparlar: 1♂, 28–30.04.2016. Aydın, Çine: 1♂, 29.04–1.05.2016.

Note. Recorded for Turkey from Aydın Province.

Teuchophorus calcaratus (Macquart, 1828)

Material. Muğla, Köyceğiz, Toparlar: 4♂, 28–30.04.2016.

Note. First record for Turkey.

Teuchophorus cristulatus Meuffels et Grootaert, 1992

Material. Muğla, Ula, Akyaka: 3♂, 16–27.05.2011; 7♂, 16–22.09.2012; 5♂, 23–27.09.2012; 1♂, 28.04–8.05.2013. Muğla, Köyceğiz, Toparlar: 1♂, 5–7.05.2013; 12♂, 11.09.2014; 6♂, 22–24.06.2015; 7♂, 28–30.04.2016.

Note. Recorded for Turkey from Muğla Province.

Teuchophorus monacanthus Loew, 1859

Material. Samsun: 3♂, 22.06–4.07.2014.

Note. Recorded for Turkey from Manisa, Muğla, Antalya and Artvin provinces.

Subfamily Xanthochlorinae

Xanthochlorus silaceus Chandler et Negrobov, 2008

Material. 2♂, Hakkari Prov., Sa Mt., Varegos, SW Yüksekova, 700 m, 29.06.1985 (W. Schacht).

Note. First record for Turkey.

Samples were made from a wide range of latitudes in Turkey. Typical low land species are most hydrophorine species as *Aphrosylus venator* or *Hydrophorus praecox* collected in salty meadows. Of special interest are species from high mountainous regions of 1750 m altitude as for example some hydrophorine species as *Hydrophorus balticus* and *Liancalus virens* or from 1200–1300 m altitude as some medeterine species like *Medetera signaticornis* and *M. petrophiloides* and some sympycninae species for example *Campsicnemus crinitarsis*, *Campsicnemus umbripennis* and *Syntormon pallipes*.

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