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## LONG-LEGGED FLIES (DIPTERA: BRACHYCERA: DOLICHOPODIDAE) FROM THE MIDDLE COURSE OF THE MARITSA RIVER AND SOME ITS TRIBUTARIES IN BULGARIA

Mihail Kechev

University of Agribusiness and Rural Development

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#### Abstract

Fourteen dolichopodid flies were collected in the period from May to August 2014. The specimens were gathered from twelve localities in the middle course of the Maritsa River and its tributaries Omurovska River, Tekira River, Kayaliika River and Klechkovo-Dere brook. The species *Chrysotus pennatus* Lichtwardt and *Tachytrechus consobrinus* (Haliday) known for Bulgaria only from the Rhodope Mountains are recorded in the Upper Thracian Plain for the first time.

#### INTRODUCTION

Family Dolichopodidae (Brachycera) encompasses small to medium size mostly predatory flies with about 7500 described species worldwide (Gharajedaghi *et al.* 2014). In Bulgaria the family Dolichopodidae has been average studied with known 168 species up to now (Kechev *et al.*, 2014). Well studied regions in Bulgaria are the northern Black Sea Coast (Beschovski 1964, 1967, 1971 and 1973) and the West Rhodope Mountains (Kechev 2006, 2007, 2010). Investigations of Dolichopodidae in the Upper Thracian Plain are still scarce (Kechev 2012a and 2012b).

#### MATERIALS AND METHODS

The material was collected by means of sweeping. Adults collected in the field were put in vials containing 70% ethanol. The samples were sorted in the laboratory using a binocular microscope. The faunistic list gives the following information: the sampling site where the species were collected, altitude (a.s.l. – above sea level), data, number and sex of each specimen examined, name of collector and distribution. For the distributions of the species were used literature by Negrobov (1991), Pollet (2004), Grichanov (2007) and the Global Biodiversity Information Facility (GBIF).

#### RESULTS

##### DIAPHORINAE Schiner, 1864

##### *Chrysotus pennatus* Lichtwardt 1902

**Material examined:** Kayaliika river near Skobelevo village, 114 m a.s.l., 03.V.2014, 2 males, 5 females, leg. M. Kechev.

**Distribution:** Armenia, Bosnia and Herzegovina, Bulgaria, ?Croatia, Germany, Greece, Hungary, Italy, ?Macedonia, Romania, Russia (Adigea, Krasnodar), ?Slovenia, ?"Yugoslavia", Turkey.

##### DOLICHOPODINAE Latreille, 1809

##### *Dolichopus nubilus* Meigen, 1824

**Material examined:** Omurovska River near Bratya Daskalovy Village, 211 m a.s.l., 11.V.2014, 2 males; Kayaliika River near Varbitsa village, 128 m a.s.l., 29.VI.2014, 2 males, 2 females, leg. M. Kechev.

**Distribution:** Austria, Belgium, Britain, Bulgaria, Crete, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Romania, Russia (central, northandsouth), Slovakia, Spain, Sweden, Switzerland, Netherland, Ukraine; China, Kazakhstan, Tajikistan, Uzbekistan.

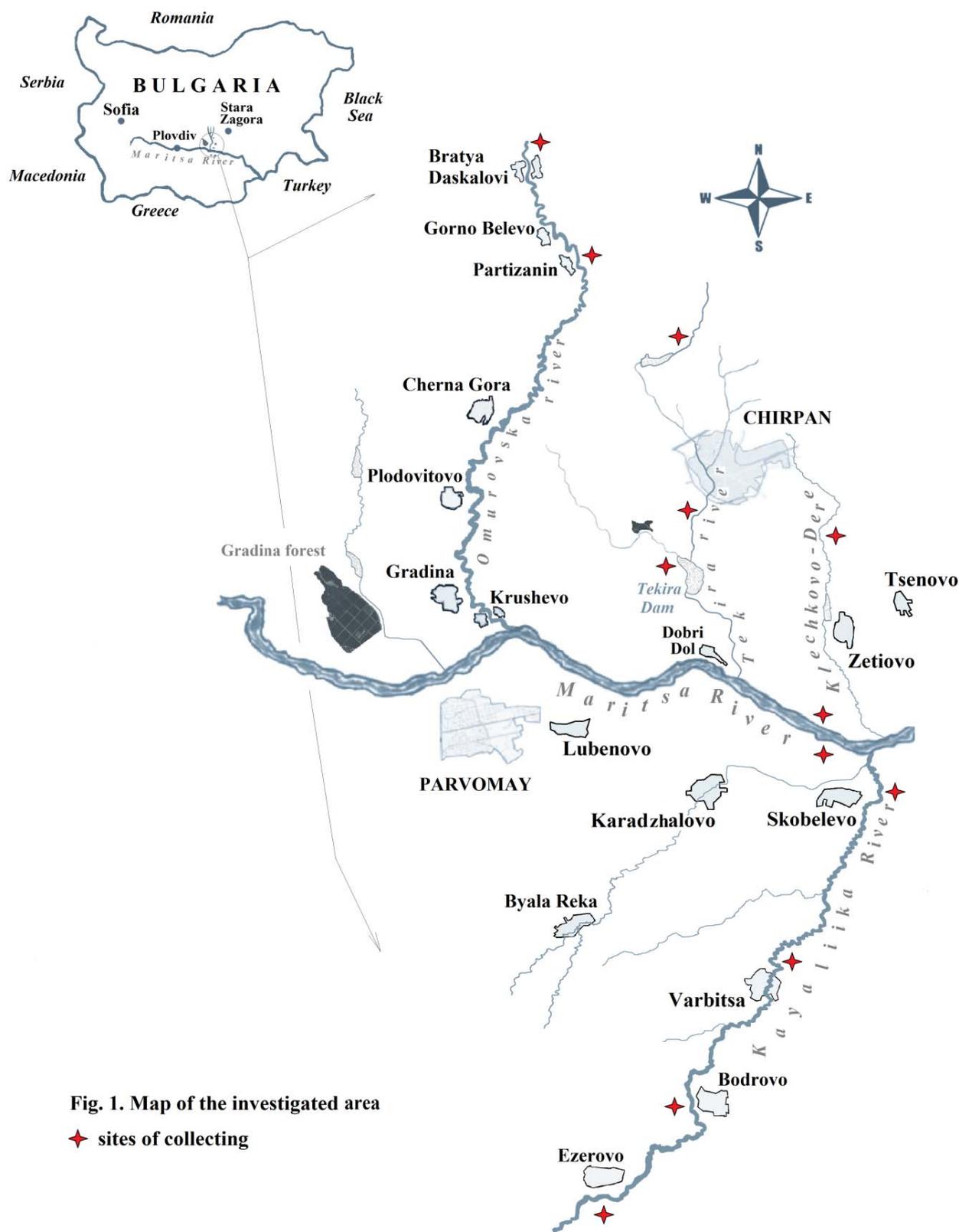


Fig. 1. Map of the investigated area

★ sites of collecting

***Dolichopus signifer* Haliday, 1838**

**Material examined:** Kayaliika River near Varbitsa village, 128 m a.s.l., 29.VI.2014, 3 males; Kayaliika River near Ezerovo village, 160 m a.s.l., 24.08.2014, 2 females, leg. M. Kechev.

**Distribution:** all Europe, Russia (Kabardino-Balkaria, Krasnodar, Rostov, Voronezh), Ukraine (Crimea, Odessa); Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, Turkey, Uzbekistan; North Africa: Morocco.

***Hercostomus convergens* Loew, 1857**

**Material examined:** Kayaliika River near Varbitsa village, 128 m a.s.l., 29.VI.2014, 1 female; leg. M. Kechev.

**Distribution:** Austria, Azerbaijan, Canaryls., France, Germany, Hungary, Israel, Italy, Poland, Romania, Russia (Central and South), Spain, Ukraine.



***Poecilobothrus regalis* (Meigen, 1824)**

**Material examined:** Omurovska river near Partizanin village, 180 m a.s.l., 31.V.2014, 1 male; Tekira river near Spasovo village, 206 m a.s.l., 18.VI.2014, 5 males, 3 females; Kayaliika River near Varbitsa village, 128 m a.s.l., 29.VI.2014, 14 males, 17 females; Kayaliika river near Ezerovo village, 160 m a.s.l., 24.08.2014, 1 female; Maritsa river, 115 m a.s.l., 29.VI.2014, 7 males, 5 females, leg. M. Kechev.

**Distribution:** Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, France, Georgia, Germany, Greece incl. North Aegean Is., Hungary, Iran, Italy, ?Macedonia, Romania, S Russia (Kabardino-Balkaria, Krasnodar, Lipetsk, Voronezh, Rostov, Stavropol), Slovakia, Spain, Turkey, Ukraine (Crimea, Kherson, Odessa), Uzbekistan, “Yugoslavia”.

***Sybistroma nodicornis* Meigen, 1824**

**Material examined:** Tekira river near the dam, 147 m a.s.l., 30.IV.2012, 3 males, leg. M. Kechev.

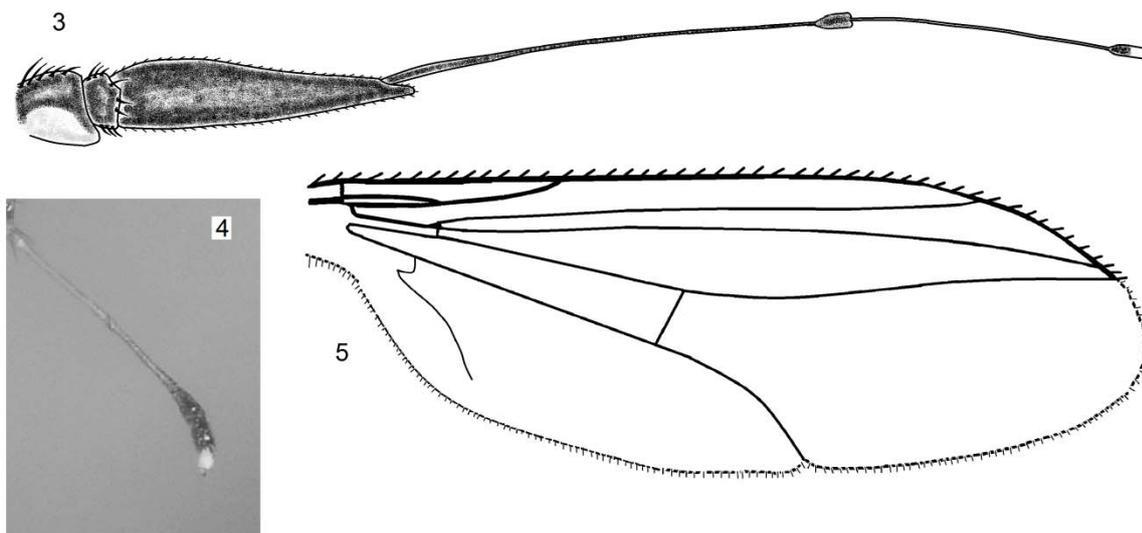
**Distribution:** Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Italy, Romania, Russia (south), Slovakia, Switzerland, Netherland, Egypt, Iraq, Israel.

***Tachytrechus consobrinus* (Haliday 1851)**

**Material examined:** Kayaliika River near Skobelevo village, 114 m a.s.l., 03.V.2014, 1 male, leg. M. Kechev.

**Distribution:** Austria, ?Belgium, Britain, Bulgaria, Czech Republic, France, Germany, Ireland, Italy, Poland, Russia (northwest), Sweden; North Africa: Morocco, Afro-tropical region: Congo, Mali.

Fig. 2. *Chrysotus pennatus* Lichtwardt: Hind leg



Figs. 3-5. *Sybistroma nodicornis* Meigen: 3. Antenna; 4. Middle tarsi; 5. Wing

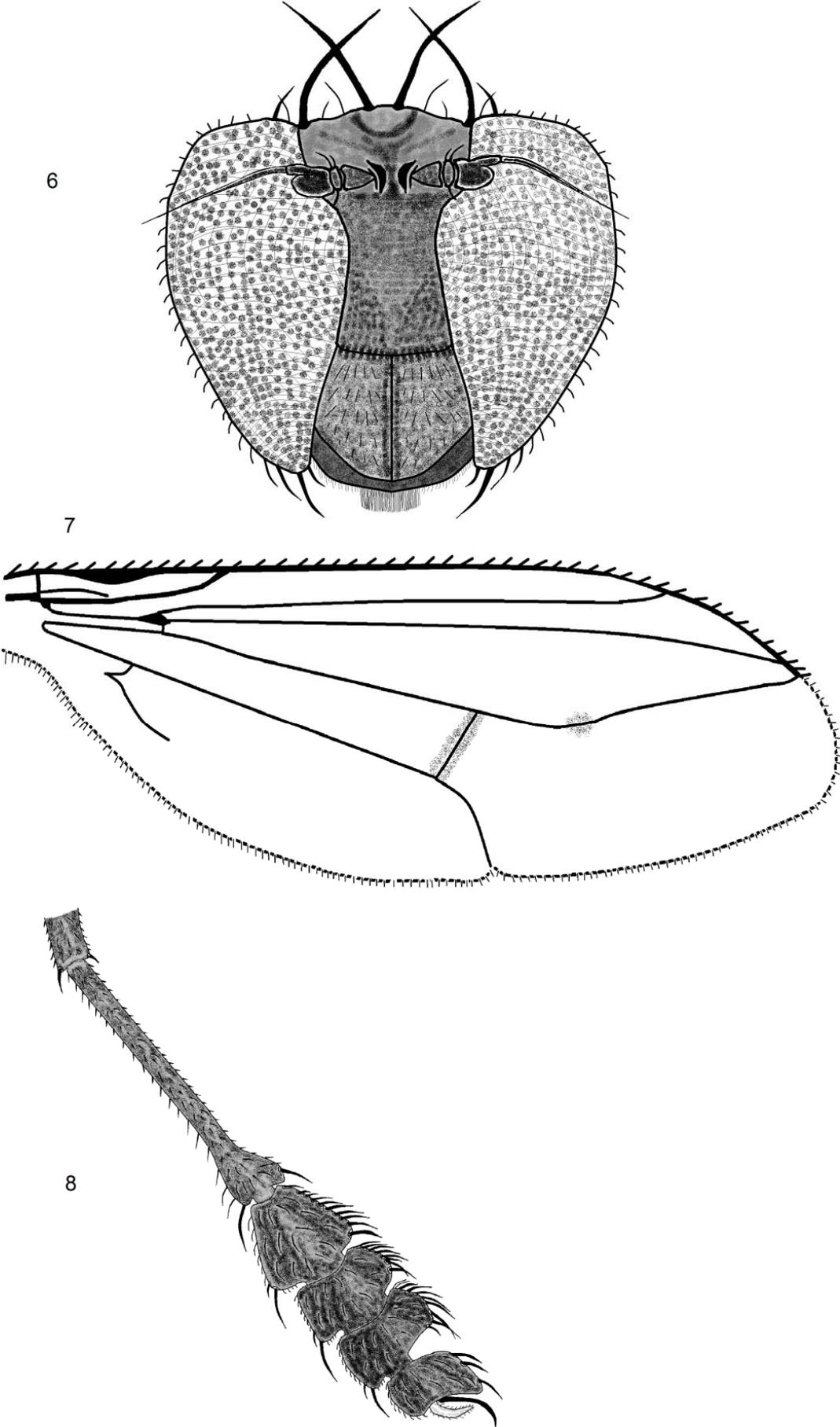


Fig. 6-8. *Tachytrechus consobrinus* (Haliday): 6. Head; 7. Wing; 8. Tarsi I.

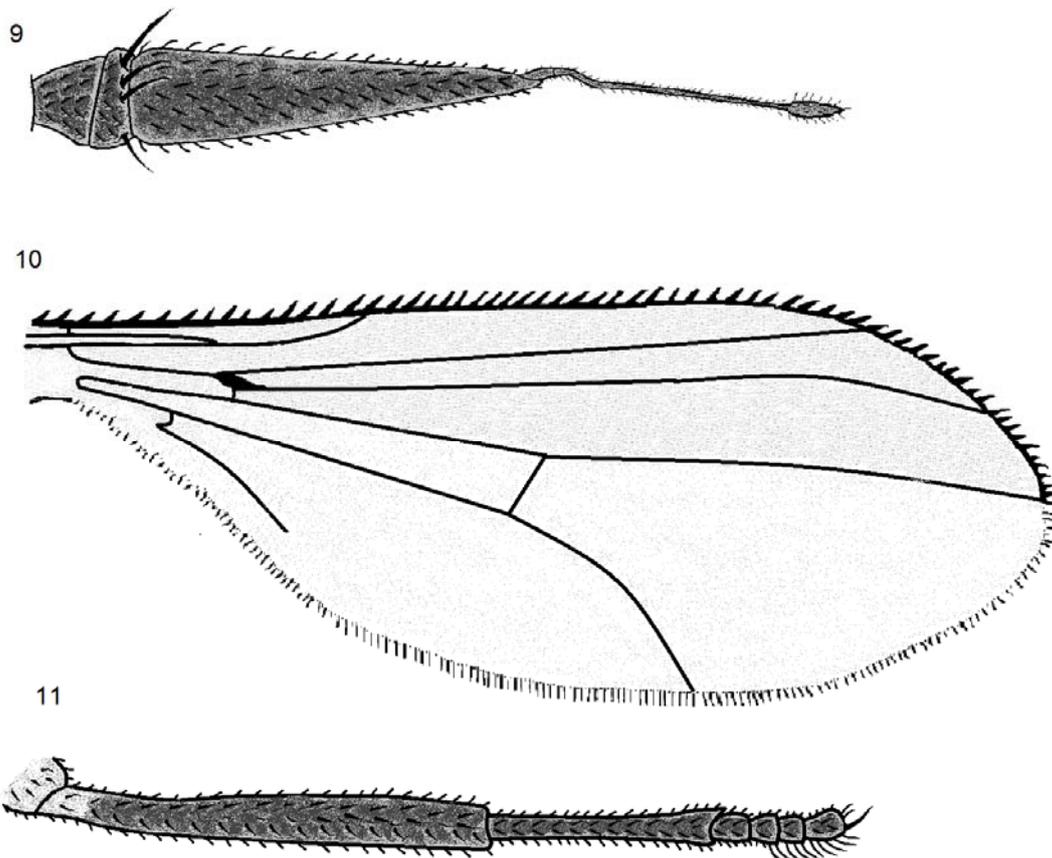


Fig. 9-11. *Rhaphium discigerum* Stenhammar: 9. Antenna; 10. Wing; 11. Tarsi I.

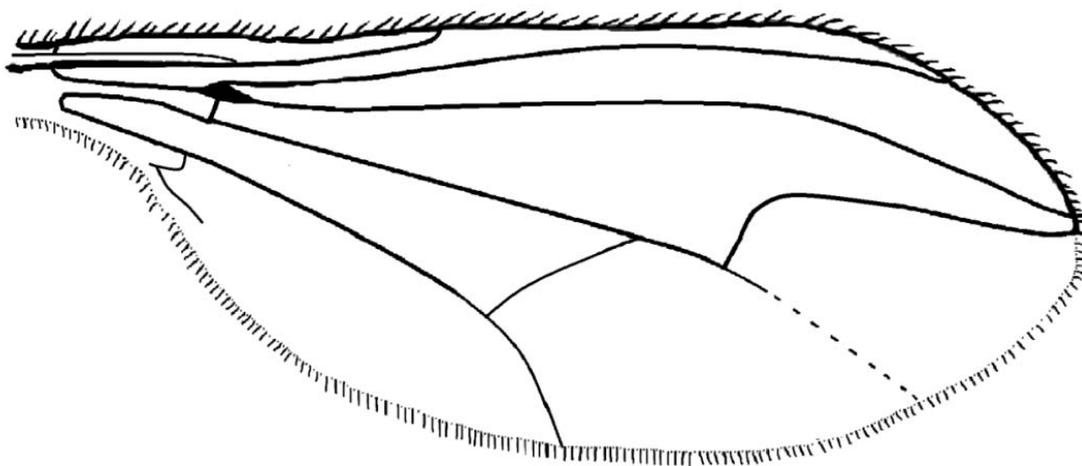


Fig. 12. *Sciapus flavicinctus* (Loew): Wing.

**RHAPHIINAE Bigot, 1852**

***Rhaphium caliginosum* (Zetterstedt 1843)**

**Material examined:** Omurovska river near BratyaDaskalovy village, 211 m a.s.l., 11.V.2014, 1 male; Kayaliika river near Bodrovo village, 152 m a.s.l., 24.08.2014, 1 female, leg. M. Kechev.

**Distribution:** Algeria, Armenia, Azerbaijan, Bulgaria, Denmark, Estonia, Finland, France, Germany, Greece, Israel, Italy, Latvia, Morocco, Norway, Romania, S Russia (Adygea, Kabardino-Balkaria, Karachai-Cherkessia, Krasnodar, Rostov, Stavropol), N Russia (Kaliningrad, Leningrad, Pskov), ?E Russia, Sweden, Syria, Turkey, UK, Ukraine (Kherson, Odessa).

**Rhaphium discigerum Stenhammar, 1851**

**Material examined:** Klechkovo-Dere near Tsenovo village, 168 m a.s.l., 26.VII.2014, 1 male, leg. M. Kechev.

**Distribution:** Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Romania, Russia (North: Pskov; South: Krasnodar), Sweden, Ukraine;Kyrgyzstan.

**SCIAPODINAE Becker, 1917**

**Sciapus flavicinctus (Loew, 1857)**

**Material examined:** Maritsariver, 115 m a.s.l., 19.V.2014, 1 male; Kayaliika river near Bodrovo village, 152 m a.s.l., 24.08.2014, 1 female,leg. M. Kechev.

**Distribution:** Azerbaijan, Bulgaria,Crete, France, Germany, Greece, Hungary,Italy, Romania, Russia(Krasnodar), Slovakia,Turkey, ?Israel.

**SYMPYCNINAE Aldrich, 1905**

**Campsicnemus simplicissimus Strobl, 1906**

**Material examined:**Tekira river near Spasovo village, 206 m a.s.l., 18.VI.2014,1 male, leg. M. Kechev.

**Distribution:** Abkhazia, Bulgaria, France, Greece (North Aegean), Hungary, Italy, Israel, Russia (Karachai-Cherkessia, Krasnodar, Rostov), Spain, Switzerland, Tajikistan, Turkey.

**Syntormon denticulatus (Zetterstedt 1843)**

**Material examined:** Kayaliika River near Varbitsa village, 128 m a.s.l., 29.VI.2014, 2 males, leg. M. Kechev.

**Distribution:** Abkhazia, Afghanistan, Armenia, Azerbaijan, Belorussia, Bulgaria, Estonia, Finland, France, Germany, Greece, Israel, Italy, Kyrgyzstan, Norway, Poland, Romania, Russia (Adygea, Alania, Kabardino-Balkaria, Karelia, Leningrad, Moscow, Murmansk, Stavropol), Sweden, Tajikistan, Turkey, Ukraine (Crimea), UK, "North Africa".

**Syntormon fuscipes (von Roser 1840)**

**Material examined:** Tekira river near Spasovo village, 206 m a.s.l., 18.VI.2014,3males, leg. M. Kechev.

**Distribution:** Austria, Belgium, Britain, Bulgaria, Czech Republic,France, Germany, Greece. Hungary,Poland, Romania, Russia (south), Slovakia, Spain, Sweden, Netherlands, Ukraine; Burundi, Kenya.

**Syntormon triangulipes Becker, 1902**

**Material examined:** Tekiradam, 143 m a.s.l., 05.VIII.2014, 1 female, leg. Kechev.

**Distribution:** Azerbaijan, Egypt, France, Russia (Krasnodar), Spain, Tajikistan.

**CONCLUSION**

The species *Chrysotus pennatus* is known for Bulgaria from Grohotno village (800 m a.s.l.) and Hrabrino village (360 m a.s.l.) in the Rhodope Mountains

(Kechev 2005). *Tachytrechus consobrinus* is known with one male specimen for Bulgaria collected at the foot of the Rhodope Mountains in Markovo village (315 m a.s.l.)(Kechev 2010). These two species found in this survey are new for the fauna of the Upper Thracian Plain.

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