

**THE FUNGUS GNATS (DIPTERA: BOLITOPHILIDAE,  
KEROPLATIDAE AND MYCETOPHILIDAE)  
OF TURKEY: PUBLISHED DATA AND NEW RECORDS**

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**Abstract.** All published data about 32 fungus gnats species of Turkey are summarized and 9 new species are recorded.

**Key words:** Fungus gnats, Sciaroidea, Bolitophilidae, Keroplatidae, Mycetophilidae, Turkey.

**INTRODUCTION**

The fungus gnat fauna of Turkey is practically unstudied. Altogether 28 species are recorded, 1 by CASPERS (1991), 18 without given localities by CHANDLER (1994), 2 by BECHEV (1995), 2 by COBANOGLU & BAYRAM (1998), 2 without localities by CHANDLER *et al.*, 2005 and 2 in the Fauna Europaea database by CHANDLER (2004). Two new species from Turkey were described in BECHEV & KOÇ (2006) and one more in BECHEV & KOÇ (in press). These data increase the number of recorded ones to the Turkish fungus gnats species up to 32. With the 9 species added here this number becomes 41.

**MATERIAL AND METHODS**

Studied material was collected by D. Bechev in European Turkey, and by H. Koç, A. Karaman and O. Ozgül in Asiatic Turkey.

## RESULTS AND DISCUSSION

### List of the species known from Turkey till 2007

<b>Taxa</b>	<b>Author</b>
<b>KEROPLATIDAE</b>	
<i>Macrocera crassicornis</i> Winnertz, 1863	Chandler, 1994
<i>Macrocera stigmoides</i> Edwards, 1925	Chandler et al., 2005
<i>Platyura marginata</i> Meigen, 1804	Chandler, 2004
<i>Urytalpa chandleri</i> Bechev & Koç	Bechev & Koç, in press
<b>MYCETOPHILIDAE</b>	
<i>Docosia gilvipes</i> (Haliday, 1856)	Cobanoglu & Bayram, 1998
<i>Leia bimaculata</i> (Meigen, 1804)	Chandler, 1994
<i>Mycomya (Cymomya) circumdata</i> (Staeger, 1840)	Chandler, 1994
<i>Sciophila muglolutea</i> Bechev & Koç, 2006	Bechev & Koç, 2006
<i>Sciophila turkolutea</i> Bechev & Koç, 2006	Bechev & Koç, 2006
<i>Sciophila delphis</i> Chandler in Chandler & Blasco-Zumeta, 2001	Bechev & Koç, 2006
<i>Allodia (Brachycampta) pistillata</i> (Lundström, 1911)	Chandler, 1994
<i>Anatella concava</i> Plassmann, 1990 = <i>Anatella longiflagellata</i> Caspers, 1991	Caspers, 1991
<i>Brevicornu griseicolle</i> (Staeger, 1840)	Chandler, 1994
<i>Brevicornu verralli</i> (Edwards, 1925)	Chandler, 1994
<i>Exechia fulva</i> Santos Abreu, 1920	Chandler, 1994
<i>Pseudexechia trisignata</i> (Edwards, 1913)	Chandler, 1994
<i>Rymosia cretensis</i> Lundström, 1911	Cobanoglu & Bayram, 1998
<i>Rymosia pseudocretensis</i> Burgele-Balacesco, 1966	Chandler, 1994
<i>Mycetophila ocellus</i> Walker, 1848	Chandler, 1994
<i>Mycetophila pictula</i> Meigen, 1830	Chandler, 1994
<i>Mycetophila spectabilis</i> Winnertz, 1863	Chandler, 1994
<i>Mycetophila strigatoides</i> (Landrock, 1927)	Chandler, 1994
<i>Mycetophila trinotata</i> Staeger, 1840	Chandler et al., 2005
<i>Mycetophila unicolor</i> Stannius, 1831	Chandler, 1994
<i>Phronia basalis</i> Winnertz, 1863	Chandler, 1994
<i>Phronia biarcuata</i> (Becker, 1908)	Chandler, 1994
<i>Phronia tenuis</i> Winnertz, 1863	Chandler, 1994
<i>Phronia willistoni</i> Dziedzicki, 1889 = <i>incisa</i> Caspers, 1991	Caspers, 1991; Chandler et al., 2005
<i>Sceptonia flavipuncta</i> Edwards, 1925	Chandler, 2004
<i>Sceptonia intestata</i> Plassmann & Schacht, 1990	Bechev, 1995
<i>Sceptonia membranacea</i> Edwards, 1925	Bechev, 1995
<i>Zygomyia valida</i> Winnertz, 1863	Chandler, 1994

New faunistic data

BOLITOPHILIDAE

*Bilitophila saundersi* (Curtis, 1836)

Asiatic Turkey: Aydin, Bozdoğan, Örentaht Köyü ( $37^{\circ}35'N/28^{\circ}20'E$ ), 786 m, 10.04.2004, Lokalite №1296, leg. H. Koç, A. Karaman & O. Ozgül, 1♂.

**Note:** New to Turkey.

KEROPLATIDAE

*Platyura marginata* Meigen, 1804

Asiatic Turkey: Aydin, Kuyucak, Saricaova, Köyü ( $38^{\circ}04'N/28^{\circ}34'E$ ), 1000 m, 07.05.2004, Lokalite №1348, leg. H. Koç, A. Karaman & O. Ozgül, 1♂.

*Macrocerata fasciata* Meigen, 1804

European Turkey: Strandzha Mts., İğneada, 10.05.2006, leg. D. Bechev, 1♂.

Asiatic Turkey: Aydin, Kuyucak, Saricaova Köyü,  $38^{\circ}04' N/28^{\circ}34' E$ , 1000 m, 07.05.2004, leg. H. Koç, A. Karaman & O. Ozgül, 1♂.

**Note:** New to Turkey.

*Macrocerata lutea* Meigen, 1804

European Turkey: Strandzha Mts., 10 km N of Yenice, 10.06.2006, leg. D. Bechev, 1♂.

**Note:** New to Turkey.

*Macrocerata phalerata* Meigen, 1818

European Turkey: Strandzha Mts., 5 km N of Dereköy, 11.05.2006, leg. D. Bechev, 2♂.

**Note:** New to Turkey.

MYCETOPHILIDAE

*Coellosia fusca* Bezzı, 1892

Asiatic Turkey: Aydin, Bozdoğan, Örentaht Köyü ( $37^{\circ}35'N/28^{\circ}20'E$ ), 786 m, 10.04.2004, Lokalite №1296, leg. H. Koç, A. Karaman & O. Ozgül, 1♂.

**Note:** New to Turkey.

*Allodiopsis rustica* (Edwards, 1941)

European Turkey: Strandzha Mts., 5 km N of Dereköy, 11.05.2006, leg. D. Bechev, 3♂.

**Note:** New to Turkey.

*Exechia fusca* (Meigen, 1804)

Asiatic Turkey: Aydin, Kuyucak, Saricaova, Köyü ( $38^{\circ}04'N/28^{\circ}34'E$ ), 1000 m, 07.05.2004, Lokalite №1348, leg. H. Koç, A. Karaman & O. Ozgül, 1♂.

***Mycetophila fungorum* (De Geer, 1776)**

Asiatic Turkey: Aydin, Bozdoğan, Örentaht Köyü (37°35'N/28°20'E), 786 m, 10.04.2004, Lokalite №1296, leg. H. Koç, A. Karaman & O. Ozgül, 2♂, 1♀.  
**Note:** New to Turkey.

***Sceptonia cryptocauda* Chandler, 1991**

Asiatic Turkey: Aydin, Bozdoğan, Örentaht Köyü (37°35'N/28°20'E), 786 m, 10.04.2004, Lokalite №1296, leg. H. Koç, A. Karaman & O. Ozgül, 2♂.  
**Note:** New to Turkey.

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**REFERENCES**

- BECHEV, D., 1995. The Palaearctic species of the genus *Sceptonia* WINNERTZ (Diptera: Mycetophilidae). – Travaux Scientifiques de l’Université de Plovdiv, Animalia, 31: 7–21.
- BECHEV, D., H. KOÇ, 2006. Two new species of *Sciophila* Meigen (Diptera: Mycetophilidae) from Turkey, with a key to the Western Palaearctic species of the *S. lutea* Macquart group. – Zootaxa 1253: 61–68.
- BECHEV, D., H. KOÇ, in press. *Urytalpa chandleri* sp. n. (Diptera: Keroplatidae) from Turkey, with a key to the Western Palaearctic species of the genus. – Zootaxa.
- CASPERS, N., 1991. New and remarkable species of Mycetophiloidea (Diptera, Nematocera) from the Mediterranean region. – Spixiana, 14: 321–338.
- CHANDLER, P., 1994. Fungus gnats of Israel (Diptera: Sciaroidea, excluding Sciaridae). – Israel Journal of Entomology, 28: 1–100.
- CHANDLER, P., 2004. Fauna Europaea: Mycetophilidae. In: de Jong, H. (Ed.), *Fauna Europaea: Diptera: Nematocera. Fauna Europaea* version 1.1. Available from: <http://www.faunaeur.org>. (accessed 03 March 2006).
- CHANDLER, P., D. BECHEV, N. CASPERS, 2005. The Fungus Gnats (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae) of Greece, its islands and Cyprus. – Studia dipterologica, 12 (2): 255–314.
- COBANOGLU, S., S. BAYRAM, 1998. Mites (Acari) and flies (Insecta: Diptera) from natural edible mushrooms (*Morchella*: Ascomycetes) in Ankara. – Turkey. Bulletin & Annales de la Societe Royale Belge d'Entomologie, 134 (3): 187–197.

**ГЪБНИ КОМАРИ (DIPTERA: BOLITOPHILIDAE,  
KEROPLATIDAE И MYCETOPHILIDAE)  
НА ТУРЦИЯ: ПУБЛИКУВАНИ СВЕДЕНИЯ И НОВИ ДАННИ**

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*(резюме)*

Фауната на Турция е почти неизследвана по отношение на гъбните комари. Тук са обобщени съобщенията за установените досега 32 вида, дават се нови находища за два от тях и се съобщават 9 нови вида. С това броят известните за Турция видове гъбни комари става 41.

