



The fungus gnats (Diptera: Sciarioidea) collection of the Regional Natural History Museum – Plovdiv

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Abstract. A list of 308 identified specimens of fungus gnats of the families Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae mainly from Bulgaria, and some from Greece, in the collection of Regional Natural History Museum – Plovdiv with notes on the collection and its condition is presented. Detailed information is provided about 32 specimens from the Oriental region - 3 holotypes (*Stenophragma borneense* Bechev & Kazandzhieva, 2020; *Chetoneura lagangensis* Kazandzhieva & Bechev, 2022; *Dziedzickia longistyla* Bechev & Kazandzhieva, 2023), 24 paratypes (*Stenophragma borneense* Bechev & Kazandzhieva, 2020; *Dziedzickia pectinata* Sevcik, Bechev & Hippa, 2011; *Dziedzickia bifida* Sevcik, Bechev & Hippa, 2011), and 5 other identified specimens preserved in the museum collection. Additional information is given about unidentified specimens of Mycetophilidae, Keroplatidae and Sciaridae.

Key words: fungus gnats, collection, Mycetophilidae, Bulgaria, Greece, Oriental.

Introduction

Fungus gnats are representatives of the families Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae (Diptera: Sciarioidea). So far, 320 species are known from Bulgaria (Bechev, 2006, 2010; Bechev & Pavlova, 2012, 2016; Kurina & Chandler, 2018; Pavlova, 2020a; Pavlova, 2020b; Pavlova & Stojanova, 2020).

The present article provides a list of identified specimens of fungus gnats deposited at the Regional Natural History Museum – Plovdiv, information about unidentified material, its labeling and/or preservation. The collection was deposited to RNHM – Plovdiv by Dimitar Bechev in 2022 and contains mainly dry specimens from the families Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Mycetophilidae, and very few Sciaridae.

The majority of insects were collected by D. Bechev from 1981 to the early 2000s from Bulgaria and some parts of Greece. The collection also contains material from the Oriental region (including holotypes and paratypes) collected by Ignac Sivec, Svetlozara Kazandzhieva and Dimitar Bechev, from Greece collected by Ignac Sivec, and from Turkey collected by Hasan Koch.

Material and methods

The majority of specimens are dry, few are preserved in alcohol. The collection is curated within the Invertebrates Division of the Regional Natural History Museum – Plovdiv and comprises 58 boxes, described as follows:

Comparative collection - boxes labeled DB01 to DB29 (Fig. 1).



Fig. 1. Comparative collection – box DB08. Photograph: Dimitar Bechev.

The comparative and additional collections contain specimens from 308 species from Bulgaria collected and identified by D. Bechev.

Additional collection - labeled box 21 to box 29. The additional collection contains more specimens of the species mentioned above.

Unspecified, partially sorted dry material - boxes labeled DB51 to DB70.

Unspecified, partially sorted material in alcohol, preserved in jars and tubes: from Greece – *Mycomya*, *Boletina*, *Trichonta*, *Phronia*, *Zygomyia*, *Cordyla*, *Mycetophila*, *Exechiini*; from Bulgaria – Rhodopes, Strandzha, Sakar, Tsarevo, Sinmorets.

The identification of most species was done by D. Bechev with few exceptions.

Information from labels is provided for the Oriental specimens only (Table 2), labeling of the dry specimens in comparative and additional collections is mostly hand-written. Genitalia were macerated in KOH and stored in glycerol in welded nylon tubes with stoppers (Fig 2.1) and plastic blister cavities (Fig 2.2).

Results

The full collection data is presented below in Table 1 and Table 2.

Data from the partially sorted, unspecified dry specimens is provided here:

DB51 (Mycetophilidae, Keroplatidae, *Bolitophila*, *Diadocidia*), DB52 (Keroplatidae, *Macrocera* from Rhodopes), DB53 (Mycetophilidae, NE, SE Bulgaria, Rhodopes), DB54 (Mycetophilidae from Yarlovo, Hrabrino, Veslets, Plovdiv, E Rhodopes), DB55 (Mycetophilidae), DB56 (Mycetophilidae from Rila, Varna, Kamchia, Lilkovo, Asenovgrad, Chudnite Mostove, Sitovo), DB57 (Mycetophilidae), DB58 (Mycetophilidae from Hrabrino, Lilkovo), DB59 (Mycetophilidae from Vrachanska Planina, Karash, Slavyanka), DB60 (Mycetophilidae from Strandzha), DB61 (Mycetophilidae from Karash, Vratsa, Rila), DB62 (Mycetophilidae, *Azana* from Greece, Rila), DB63 (Sciaridae), DB64 (Mycetophilidae, *Brevicornu*), DB65 (Mycetophilidae), DB66 (Mycetophilidae,

Zygomyia, Phronia), DB67
(Mycetophilidae from Rhodopes, Rila),
DB68 (Mycetophilidae, Gnoristini,

Sciophilini, Leiini), DB69
(Mycetophilidae, Mycomya, Neoempheria)
DB70 (Mycetophilidae, Allodia).

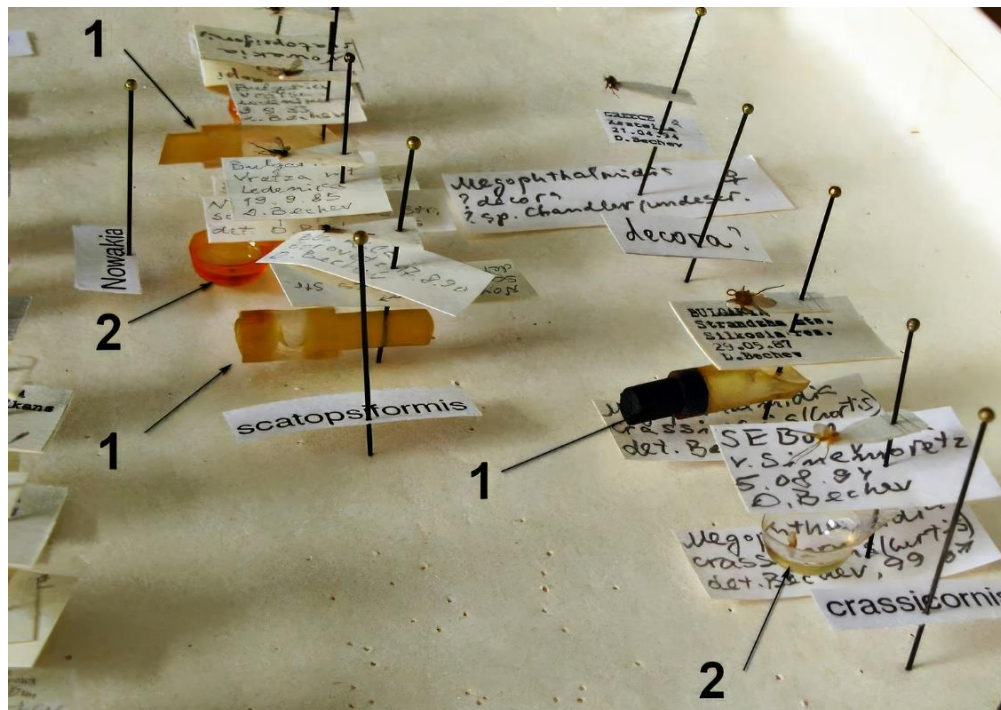


Fig. 2. Storage of genitalia in welded nylon tubes with rubber stoppers (1) and plastic blister cavities (2). Photograph: Dimitar Bechev.

Table 1. List of materials in D. Bechev's comparative (DB01-DB29) and additional (Box 21-Box29) collections deposited at RNHM – Plovdiv.

Family/ Subfamily/ Tribe	Species	Comparative collection in Box DB#	Other specimens in Box #
Bolitophilidae	<i>Bolitophila (Bolitophila) basicornis</i> (Mayer, 1951)	DB01	
	<i>Bolitophila (Bolitophila) cinerea</i> Meigen, 1818	DB01	Box 23
	<i>Bolitophila (Bolitophila) saundersi</i> (Curtis, 1836)	DB01	Box 23
	<i>Bolitophila (Bolitophila) tenella</i> Winnertz, 1863	DB01	
	<i>Bolitophila (Cliopisa) fumida</i> Edwards, 1941	DB01	
	<i>Bolitophila (Cliopisa) hybrida</i> (Meigen, 1804)	DB01	

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	<i>Bolitophila (Cliopisa) maculipennis</i> Walker, 1836	DB01	
	<i>Bolitophila (Cliopisa) pseudohybrida</i> Landrock, 1912	DB01	
Diadocidiidae	<i>Diadocidia (Adidocidia) valida</i> Mik, 1874	DB02	
	<i>Diadocidia (Diadocidia) ferruginosa</i> (Meigen, 1830)	DB02	Box 23
	<i>Diadocidia (Diadocidia) spinosula</i> Tollet, 1948	DB02	
Ditomyiidae	<i>Ditomyia fasciata</i> (Meigen, 1818)	DB03	Box 21
	<i>Symmerus annulatus</i> (Meigen, 1830)	DB03	
Keroplastidae/ Keroplastinae/ Keroplastini	<i>Cerotelion racovitzai</i> Matile & Burghel-Balancesco, 1969	DB04	Box 21
	<i>Cerotelion striatum</i> (Gmelin, 1790)	DB04	
	<i>Keroplatus reaumurii</i> Dufour, 1839	DB04	
	<i>Keroplatus testaceus</i> Dalman, 1818	DB04	
	<i>Keroplatus tipuloides</i> Bosc, 1792	DB04	
Keroplastidae/ Keroplastinae/ Orfeliini	<i>Antlemon (Antlemonopsis) brevimanum</i> (Loew, 1871)	DB05	
	<i>Isoneuromyia semirufa</i> (Meigen, 1818)	DB07	
	<i>Macrorrhyncha collarti</i> (Tollet, 1955)	DB05	
	<i>Macrorrhyncha flava</i> Winnertz, 1846	DB05	
	<i>Monocentrotia lundstromi</i> Edwards, 1925	DB07 (England)	
	<i>Neoplatyura modesta</i> (Winnertz, 1863)	DB07	
	<i>Neoplatyura nigricauda</i> (Strobl, 1893)	DB07	
	<i>Orfelia bezzii</i> (Strobl, 1910)	DB06	
	<i>Orfelia bicolor</i> (Macquart, 1826)	DB06	
	<i>Orfelia fasciata</i> (Meigen, 1804)	DB06	
	<i>Orfelia nemoralis</i> (Meigen, 1818)	DB06	
	<i>Orfelia nigricornis</i> (Fabricius, 1805)	DB06	
	<i>Orfelia tristis</i> (Lundström, 1911)	DB06	
	<i>Orfelia unicolor</i> (Staeger, 1840)	DB06	Box 21, 27
	<i>Platyura marginata</i> Meigen, 1804	DB07	
	<i>Pyratula oracula</i> Chandler, 1994	DB07	
	<i>Pyratula perpusilla</i> (Edwards, 1913)	DB07	Box 21
	<i>Pyratula subcanariae</i> Chandler, 2001	DB07	
	<i>Urytalpa ochracea</i> (Meigen, 1818)	DB07	
	<i>Urytalpa dorsalis</i> (Staeger, 1840) = <i>Urytalpa rhapsodica</i> Chandler, 1995	DB07	
Keroplastidae/ Macrocerinae/ Macrocerini	<i>Macrocera anglica</i> Edwards, 1925	DB10	Box 21
	<i>Macrocera angulata</i> Meigen, 1818	DB11	Box 21

	<i>Macrocera centralis</i> Meigen, 1818	DB11	Box 21
	<i>Macrocera crassicornis</i> Winnertz, 1863	DB12	
	<i>Macrocera estonica</i> Landrock, 1924	DB09 (England)	
	<i>Macrocera fasciata</i> Meigen, 1804	DB12	Box 23
	<i>Macrocera fascipennis</i> Staeger, 1840	DB11 (England)	
	<i>Macrocera fastuosa</i> Loew, 1869	DB11	
	<i>Macrocera gemagea</i> Bechev, 1991	DB09	
	<i>Macrocera grandis</i> Lundström, 1912	DB11	
	<i>Macrocera inversa</i> Loew, 1869	DB12	
	<i>Macrocera kerteszi</i> Lundström, 1911	DB10	
	<i>Macrocera lutea</i> Meigen, 1804	DB10	Box 21, 27
	<i>Macrocera maculata</i> Meigen, 1818	DB11 (England)	
	<i>Macrocera nigricoxa</i> Winnertz, 1863	DB12	
	<i>Macrocera parva</i> Lundström, 1914	DB12	
	<i>Macrocera phalerata</i> Meigen, 1818	DB08	
	<i>Macrocera pilosa</i> Landrock, 1917	DB09	
	<i>Macrocera stigma</i> Curtis, 1837	DB08	
	<i>Macrocera stigmoides</i> Edwards, 1925	DB09	
	<i>Macrocera vittata</i> Meigen, 1830	DB10	Box 21
Myceophilidae/ Gnoristinae	<i>Apolephthisa subincana</i> (Curtis, 1837)	DB13	
	<i>Boletina anderschi</i> (Stannius, 1831)	DB14	Box 21, 25
	<i>Boletina basalis</i> (Meigen, 1818)	DB14	
	<i>Boletina dubia</i> (Meigen, 1804)	DB14 (England)	
	<i>Boletina gripa</i> Dziedzicki, 1885	DB14	
	<i>Boletina lundstroemi</i> Landrock, 1912	DB14	
	<i>Boletina nigricoxa</i> Staeger, 1840	DB14	
	<i>Boletina nitida</i> Grzegorzek, 1885	DB14	Box 25
	<i>Boletina pallidula</i> Edwards, 1925	DB14	
	<i>Boletina plana</i> (Walker, 1856)	DB14	
	<i>Boletina sciarina</i> Staeger, 1840	DB14	Box 25
	<i>Boletina trispinosa</i> Edwards, 1913	DB14	Box 25
	<i>Boletina trivittata</i> (Meigen, 1818)	DB14	Box 22, 25
	<i>Coelosia flava</i> (Staeger, 1840)	DB13	
	<i>Coelosia fusca</i> (Staeger, 1840)	DB13	
	<i>Grzegorzekia collaris</i> (Meigen, 1818)	DB13	
	<i>Palaeodocosia janickii</i> (Dziedzicki, 1923)	DB13	
	<i>Saigusaia flaviventris</i> (Strobl, 1894)	DB13	
	<i>Synapha fasciata</i> Meigen, 1818	DB13	Box 23
	<i>Synapha vitripennis</i> (Meigen, 1818)	DB13	Box 21, 23

	<i>Tetragoneura ambigua</i> Grzegorzek, 1885	DB13	Box 23
	<i>Tetragoneura sylvatica</i> (Curtis, 1837)	DB13	
Myceophilidae/ Leiinae	<i>Clastobasis alternans</i> (Winnertz, 1863)	DB15	Box 23
	<i>Docosia gilvipes</i> (Walker, 1856)	DB15	Box 24
	<i>Docosia moravica</i> Landrock, 1916	DB15	Box 24
	<i>Greenomyia mongolica</i> Laštovka & Matile, 1974	DB15	
	<i>Leia bimaculata</i> (Meigen, 1804)	DB15	Box 21
	<i>Leia cylindrica</i> (Winnertz, 1863)	DB15	Box 21
	<i>Leia picta</i> Meigen, 1830	DB15	
	<i>Leia winthemii</i> Lehmann, 1822	DB15	
	<i>Megophthalmida crassicornis</i> (Curtis, 1837)	DB15	
	<i>Novakia scatopsiformis</i> Strobl, 1893	DB15	
	<i>Rondaniella dimidiata</i> (Meigen, 1804)	DB15	Box 21
Myceophilidae/ Mycetophilinae/ Exechiini	<i>Allodia (Allodia) anglofennica</i> Edwards, 1921	DB16	
	<i>Allodia (Allodia) lugens</i> Wiedemann, 1817	DB16	
	<i>Allodia (Allodia) ornatcollis</i> (Meigen, 1818)	DB16	
	<i>Allodia (Allodia) truncata</i> Edwards, 1921	DB16	
	<i>Allodia (Brachycampta) alternans</i> (Zetterstedt, 1838)	DB16	
	<i>Allodia (Brachycampta) barbata</i> (Lundström, 1909)	DB16	
	<i>Allodia (Brachycampta) foliifera</i> (Strobl, 1910)	DB16	
	<i>Allodia (Brachycampta) grata</i> (Meigen, 1830)	DB16	
	<i>Allodia (Brachycampta) neglecta</i> Edwards, 1925	DB16	
	<i>Allodia (Brachycampta) pistillata</i> (Lundström, 1911)	DB16	
	<i>Allodia (Brachycampta) silvatica</i> (Landrock, 1912)	DB16	
	<i>Allodia (Brachycampta) triangularis</i> (Strobl, 1895) as <i>retracta</i> Plassmann	DB16	
	<i>Allodia (Brachycampta) westerholti</i> Caspers, 1980	DB16	
	<i>Allodiopsis domestica</i> (Meigen, 1830)	DB16	
	<i>Allodiopsis pseudodomestica</i> (Lackschewitz, 1937)	DB16	
	<i>Allodiopsis rustica</i> (Edwards, 1941)	DB16	Box 27
	<i>Anatella ciliata</i> Winnertz, 1863	DB17	Box 27
	<i>Anatella lenis</i> Dziedzicki, 1923	DB17	Box 27
	<i>Anatella minuta</i> (Staeger, 1840)	DB17	Box 27
	<i>Anatella novata</i> Dziedzicki, 1923	DB17	

<i>Anatella simpatica</i> Dziedzicki, 1923	DB17	
<i>Anatella turi</i> Dziedzicki, 1923	DB17	
<i>Brevicornu (Brevicornu) fissicauda</i> (Lundström, 1911)	DB17	Box 28
<i>Brevicornu (Brevicornu) griseicollae</i> (Staeger, 1840)	DB17	Box 28
<i>Brevicornu (Brevicornu) ruficorne</i> (Meigen, 1838)	DB17	
<i>Brevicornu (Brevicornu) sericoma</i> (Meigen, 1830)	DB17	Box 28
<i>Brevicornu (Brevicornu) spathulatum</i> (Lundström, 1911)	DB17	
<i>Brevicornu</i> spp. unidentified	DB17	
<i>Cordyla brevicornis</i> (Staeger, 1840)	DB29	
<i>Cordyla crassicornis</i> Meigen, 1818	DB29	
<i>Cordyla fasciata</i> Meigen, 1830	DB29	
<i>Cordyla fissa</i> Edwards, 1925	DB29	
<i>Cordyla flaviceps</i> (Staeger, 1840)	DB29	
<i>Cordyla fusca</i> Meigen, 1804	DB29	
<i>Cordyla nitidula</i> Edwards, 1925	DB29	
<i>Cordyla semiflava</i> (Staeger, 1840)	DB29	
<i>Exechia bicincta</i> (Staeger, 1840)	DB18	Box 26
<i>Exechia dizona</i> Edwards, 1925	DB18	
<i>Exechia dorsalis</i> (Staeger, 1840)	DB18	Box 24
<i>Exechia exigua</i> Lundström, 1909	DB18	Box 26
<i>Exechia festiva</i> Winnertz, 1863	DB18	
<i>Exechia fulva</i> Santos Abreu, 1920 as <i>peyerimhoffi</i>	DB18	Box 24
<i>Exechia fusca</i> (Meigen, 1804)	DB18	Box 26
<i>Exechia lundstroemi</i> Landrock, 1923	DB18	
<i>Exechia macula</i> Chandler, 2001	DB18	
<i>Exechia parva</i> Lundström, 1909	DB18	
<i>Exechia pseudocincta</i> Strobl, 1909	DB18	Box 26
<i>Exechia separata</i> Lundström, 1912	DB18	Box 26
<i>Exechia seriata</i> (Meigen, 1830)	DB18	Box 24
<i>Exechiopsis (Exechiopsis) clypeata</i> (Lundström, 1911)	DB19	
<i>Exechiopsis (Exechiopsis) dumitrescui</i> (Burghele-Balacesco, 1972)	DB19	
<i>Exechiopsis (Exechiopsis) furcata</i> (Lundström, 1912)	DB19	
<i>Exechiopsis (Exechiopsis) lackschewitziana</i> (Stackelberg, 1948)	DB19	
<i>Exechiopsis (Exechiopsis) magnicauda</i> (Lundström, 1911)	DB19	Box 27
<i>Exechiopsis (Exechiopsis) subulata</i> (Winnertz, 1863)	DB19	Box 27

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	<i>Exechiopsis (Exechiopsis) unguiculata</i> (Lundström, 1911)	DB19	
	<i>Exechiopsis (Exechiopsis) vizzavonensis</i> (Edwards, 1928)	DB19	
	<i>Exechiopsis (Xenexechia) crucigera</i> (Lundström, 1909)	DB19	
	<i>Exechiopsis (Xenexechia) davatchii</i> (Matile, 1969)	DB19	
	<i>Exechiopsis (Xenexechia) leptura</i> (Meigen, 1830)	DB19	
	<i>Notolopha cristata</i> (Staeger, 1840)	DB16	Box 27
	<i>Pseudexechia trisignata</i> (Edwards, 1913)	DB20	
	<i>Pseudobrachypeza helvetica</i> (Walker, 1856)	DB20	Box 27
	<i>Pseudorymosia fovea</i> (Dziedzicki, 1909)	DB20	
	<i>Rymosia affinis</i> Winnertz, 1863	DB20	Box 27
	<i>Rymosia fasciata</i> (Meigen, 1804)	DB20	Box 27
	<i>Rymosia fraudatrix</i> Dziedzicki, 1910	DB20	
	<i>Rymosia placida</i> Winnertz, 1863	DB20	Box 27
	<i>Rymosia setiger</i> Dziedzicki, 1910	DB20	
	<i>Rymosia spinipes</i> Winnertz, 1863	DB20	Box 27
	<i>Rymosia virens</i> Dziedzicki, 1910	DB20	Box 27
	<i>Synplasta gracilis</i> (Winnertz, 1863)	DB20	
	<i>Synplasta exclusa</i> (Lackschewitz, 1937) as <i>sintenisi</i>	DB20	
	<i>Tarnania fenestralis</i> (Meigen, 1818)	DB20	
	<i>Tarnania nemoralis</i> (Edwards, 1941)	DB20	
	<i>Tarnania tarnanii</i> (Dziedzicki, 1910)	DB20 (Russia)	
	<i>Rymosia virens</i> Dziedzicki, 1910	DB20	Box 27
	<i>Synplasta gracilis</i> (Winnertz, 1863)	DB20	
	<i>Synplasta exclusa</i> (Lackschewitz, 1937) as <i>sintenisi</i>	DB20	
	<i>Tarnania fenestralis</i> (Meigen, 1818)	DB20	
	<i>Tarnania nemoralis</i> (Edwards, 1941)	DB20	
Myceophilidae/ Mycetophilinae/ Mycetophilini	<i>Dynatosoma fuscicorne</i> (Meigen, 1818)	DB21	Box 23
	<i>Dynatosoma majus</i> Landrock, 1912	DB21	Box 23
	<i>Dynatosoma nigromaculatum</i> Lundström, 1913	DB21	
	<i>Dynatosoma nobile</i> (Walker, 1848)	DB21 (Russia)	
	<i>Dynatosoma reciprocum</i> (Walker, 1848)	DB21 (Russia)	
	<i>Dynatosoma ussuriense</i> Zaitzev, 1986	DB21 (Russia)	
	<i>Epicrypta torquata</i> Matile, 1977	DB21	
	<i>Mycetophila abiecta</i> (Laštovka, 1963)	DB22	
	<i>Mycetophila adumbrata</i> Mik, 1884	DB22	

<i>Mycetophila alea</i> Laffoon, 1965	DB22	Box 25, 29
<i>Mycetophila bialorussica</i> Dziedzicki, 1884	DB22	
<i>Mycetophila blanda</i> Winnertz, 1863	DB22	Box 29
<i>Mycetophila caudata</i> Staeger, 1840	DB22	
<i>Mycetophila celator</i> (Laffoon, 1957)	DB22	
<i>Mycetophila confluens</i> Dziedzicki, 1884	DB22	Box 28
<i>Mycetophila curviseta</i> Lundstrom, 1911	DB22 (England)	
<i>Mycetophila czizeki</i> Landrock, 1911	DB22	Box 22
<i>Mycetophila distigma</i> Meigen, 1830	DB22	
<i>Mycetophila dziedzickii</i> Chandler, 1977	DB22	
<i>Mycetophila edwardsi</i> Lundström, 1913	DB22	Box 29
<i>Mycetophila formosa</i> Lundström, 1911	DB22	
<i>Mycetophila fraterna</i> Winnertz, 1863	DB22	Box 28
<i>Mycetophila finlandica</i> Edwards, 1913	DB22 (England)	
<i>Mycetophila fungorum</i> (De Geer, 1776)	DB22	Box 28
<i>Mycetophila gibbula</i> Edwards, 1925	DB22	
<i>Mycetophila hyrcania</i> Laštovka et Matile, 1969	DB22	
<i>Mycetophila lamellata</i> Lundström, 1911	DB22	
<i>Mycetophila lastovkai</i> Caspers, 1984	DB22	
<i>Mycetophila luctuosa</i> Meigen, 1830	DB22	Box 22
<i>Mycetophila lunata</i> Meigen, 1804	DB23	
<i>Mycetophila marginata</i> Winnertz, 1863	DB23	Box 22, 29
<i>Mycetophila mitis</i> (Johannsen, 1912)	DB23	
<i>Mycetophila morosa</i> Winnertz, 1863	DB23	
<i>Mycetophila occultans</i> Lundström, 1913	DB23	
<i>Mycetophila ocellus</i> Walker, 1848	DB23	Box 29
<i>Mycetophila ornata</i> Stephens, 1829	DB23	Box 28
<i>Mycetophila pumila</i> Winnertz, 1863	DB23	Box 29
<i>Mycetophila scotica</i> Edwards, 1941	DB23	
<i>Mycetophila sigillata</i> Dziedzicki, 1884	DB23	
<i>Mycetophila signata</i> Meigen, 1830	DB23	Box 22
<i>Mycetophila signatoides</i> Dziedzicki, 1884	DB23	Box 22
<i>Mycetophila spectabilis</i> Winnertz, 1863	DB23	Box 29
<i>Mycetophila stolidula</i> Walker, 1856	DB23	
<i>Mycetophila stylata</i> (Dziedzicki, 1884)	DB23	
<i>Mycetophila tridentata</i> Lundström, 1911	DB23	
<i>Mycetophila trinotata</i> Staeger, 1840	DB23	Box 28
<i>Mycetophila unguiculata</i> Lundström, 1913	DB23	
<i>Mycetophila vittipes</i> Zetterstedt, 1852	DB23	
<i>Mycetophila v-nigrum</i> Lundström, 1913	DB23	Box 22
<i>Phronia cinerascens</i> Winnertz, 1863	DB24	

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	<i>Phronia conformis</i> (Walker , 1856)	DB24	
	<i>Phronia exigua</i> (Zetterstedt, 1852)	DB24	
	<i>Phronia forcipata</i> Winnertz, 1863	DB24	
	<i>Phronia nitidiventris</i> (van der Wulp, 1858)	DB24	
	<i>Phronia obtusa</i> Winnertz, 1863	DB24	
	<i>Phronia signata</i> Winnertz, 1863	DB24	
	<i>Phronia tenuis</i> Winnertz, 1863	DB24	
	<i>Platurocypta punctum</i> (Stannius, 1831)	DB21	
	<i>Sceptonia costata</i> (Wulp, 1858)	DB25 (Scotland)	
	<i>Sceptonia cryptocauda</i> Chandler , 1991	DB25	
	<i>Sceptonia flavipuncta</i> Edwards, 1925	DB25	
	<i>Sceptonia fumipes</i> Edwards, 1925	DB25 (England)	
	<i>Sceptonia humerella</i> Edwards, 1941	DB25	
	<i>Sceptonia membranacea</i> Edwards, 1925	DB25	
	<i>Sceptonia nigra</i> (Meigen, 1804)	DB25	
	<i>Sceptonia pilosa</i> Bukowski, 1934	DB25	
	<i>Sceptonia pughi</i> Chandler , 1991	DB25	
	<i>Sceptonia tenuis</i> Edwards, 1925	DB25	
	<i>Trichonta apicalis</i> Strobl, 1898	DB21	
	<i>Trichonta beata</i> Gagné, 1981	DB21	
	<i>Trichonta clavigera</i> Lundström, 1913	DB21	Box 21
	<i>Trichonta conjungens</i> Lundström, 1909	DB21	
	<i>Trichonta falcata</i> Lundström, 1911	DB21	Box 21, 27
	<i>Trichonta fragilis</i> Gagné, 1981	DB21	
	<i>Trichonta fusca</i> Landrock, 1918	DB21	
	<i>Trichonta girschneri</i> Landrock, 1912	DB21	
	<i>Trichonta melanura</i> (Staeger, 1840)	DB21	Box 21, 27
	<i>Trichonta subfusca</i> Lundström, 1909	DB21	
	<i>Trichonta submaculata</i> (Staeger, 1840)	DB21	
	<i>Trichonta terminalis</i> (Walker, 1856)	DB21	Box 21
	<i>Trichonta venosa</i> (Staeger, 1840)	DB21	
	<i>Trichonta vitta</i> (Meigen, 1830)	DB21	Box 21, 27
	<i>Trichonta vulgaris</i> Loew, 1869	DB21	Box 21, 27
	<i>Zygomysia valida</i> Winnertz, 1863	DB25	
Mycetophilidae/ Mycomyinae	<i>Mycomysia annulata</i> (Meigen, 1818)	DB26 (England)	
	<i>Mycomysia (Cymomyia) circumdata</i> (Staeger, 1840)	DB26	Box 26
	<i>Mycomysia (Mycomysia) bicolor</i> (Dziedzicki, 1885)	DB26	
	<i>Mycomysia (Mycomysia) cinerascens</i> (Macquart, 1826)	DB26	Box 22, 26

<i>Mycomya (Mycomya) denmax</i> Väisänen, 1979	DB26	Box 22
<i>Mycomya (Mycomya) digitifera</i> Edwards, 1925	DB26	
<i>Mycomya (Mycomya) fasciata</i> (Zetterstedt, 1838)	DB26	
<i>Mycomya (Mycomya) flavicollis</i> (Zetterstedt, 1852)	DB26	Box 22, 26
<i>Mycomya (Mycomya) marginata</i> (Meigen, 1818)	DB26	Box 22, 26
<i>Mycomya (Mycomya) neohyalinata</i> Väisänen, 1984	DB26	
<i>Mycomya (Mycomya) occultans</i> (Winnertz, 1863)	DB26	
<i>Mycomya (Mycomya) parva</i> (Dziedzicki, 1885)	DB26	Box 26
<i>Mycomya (Mycomya) sigma</i> Johannsen, 1910	DB26	Box 26
<i>Mycomya (Mycomya) tenuis</i> (Walker, 1856)	DB26	Box 22, 26
<i>Mycomya (Mycomya) tridens</i> (Lundström, 1911)	DB26	Box 26
<i>Mycomya (Mycomya) vittiventris</i> (Zetterstedt, 1852)	DB26	Box 22
<i>Mycomya (Mycomya) wankowiczii</i> (Dziedzicki, 1885)	DB26	Box 26
<i>Mycomya (Mycomya) winnertzi</i> (Dziedzicki, 1885)	DB26	Box 26
<i>Mycomya (Mycomyopsis) penicillata</i> (Dziedzicki, 1885)	DB26	
<i>Mycomya (Mycomyopsis) trilineata</i> (Zetterstedt, 1838)	DB26	Box 26
<i>Mycomya (Neomycomya) fimbriata</i> (Meigen, 1818)	DB26	
<i>Neoempheria bimaculata</i> (von Roser, 1840)	DB27	
<i>Neoempheria lineola</i> (Meigen, 1818)	DB27	
<i>Neoempheria pictipennis</i> (Haliday, 1833)	DB27	
<i>Neoempheria proxima</i> (Winnertz, 1863)	DB27	
<i>Neoempheria striata</i> (Meigen, 1818)	DB27	
Mycetophilidae/ Sciophilinae		
<i>Acnemia amoena</i> Winnertz, 1863	-	Jar DBb2
<i>Acnemia angusta</i> Zaitzev, 1982	-	Jar DBb2
<i>Acnemia falcata</i> Zaitzev, 1982	DB 28	
<i>Acnemia longipes</i> Winnertz, 1863	DB 28	Box 23
<i>Acnemia nitidicollis</i> (Meigen, 1818)	DB 28	Box 21, 23
<i>Azana (Azana) anomala</i> (Staeger, 1840)	DB 28	
<i>Azana (Azana) flavohalterata</i> Strobl in Czerny & Strobl 1909	DB 28	
<i>Azana (Jugazana) nigricoxa</i> Strobl, 1889	DB 28	
<i>Megalopelma nigroclavatum</i> (Strobl, 1910)	DB 28	
<i>Monoclona rufilatera</i> (Walker, 1837)	DB 28	

<i>Neuratelia minor</i> (Lundström, 1912)	DB 28	Box 23
<i>Neuratelia nemoralis</i> (Meigen, 1818)	DB 28	Box 23
<i>Paratinia sciarina</i> Mik, 1874	DB 28	
<i>Phthinia humilis</i> Winnertz, 1863	DB 28	
<i>Phthinia winnertzi</i> Mik, 1869	DB 28	
<i>Polylepta guttiventris</i> (Zetterstedt, 1852)	DB 28	
<i>Polylepta borealis</i> Lundstrom, 1912	DB 28 (Russia)	
<i>Sciophila baltica</i> Zaitzev, 1982	DB 28	Box 21, 23
<i>Sciophila fenestella</i> Curtis, 1837	DB 28	
<i>Sciophila hirta</i> Meigen, 1818	DB 28	
<i>Sciophila lutea</i> Macquart, 1826	DB 28	Box 21, 23
<i>Sciophila nonnisilva</i> Hutson, 1979	DB 28	
<i>Sciophila rufa</i> Meigen, 1830	DB 28	Box 21, 23
<i>Sciophila thoracica</i> Staeger, 1840 as <i>quadriterga</i>	DB 28	Box 23
<i>Speolepta leptogaster</i> (Winnertz, 1863)	DB 28	

Table 2. List of identified specimens of fungus gnats from the Oriental region stored in alcohol in the collection of RNHM – Plovdiv (hol = holotype, par = paratype).

Family Subfamily/ Tribe	Coll. Code	Species	Type	Spec. Sex	Locality data	Notes
Mycetophilidae / Sciophilinae	ORI2_ HOL1	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	hol	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; Leg. Kazandzhieva	*Holotype Intact, wings folded
Keroplatidae/ Orfeliini	ORI2_ HOL2	<i>Chetoneura</i> <i>lagangensis</i> Kazandzhieva & Bechev, 2022	hol	1♂	MALAYSIA: Sarawak, Gunung Mulu NP, Lagang cave; 14.7.2019, leg. Kazandzhieva, sweep net	*Holotype Terminalia a in microvial with the specimen
Mycetophilidae / Gnoristinae	ORI2_ HOL3	<i>Dziedzickia</i> <i>longistyla</i> Bechev & Kazandzhieva 2023	hol	1♂	MALAYSIA: Malaysia: Sarawak, Kubah NP, leg. Kazandzhieva	n/a
Mycetophilidae / Sciophilinae	ORI1_ A1	<i>Stenophragma</i> <i>borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P2 Almost intact, parts of legs missing
Mycetophilidae / Sciophilinae	ORI1_ A2	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P3 Almost intact, parts of legs missing

<i>Svetlozara B. Kazandzhieva</i>						
Mycetophilidae/ Sciophilinae	ORI1_ A3	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P4 Intact in good condition
Mycetophilidae/ Sciophilinae	ORI1_ A4	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P5 Almost intact, left wing damaged
Mycetophilidae/ Sciophilinae	ORI1_ A5	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P6 Intact
Mycetophilidae/ Sciophilinae	ORI1_ A6	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P7 Intact in good condition
Mycetophilidae/ Sciophilinae	ORI1_ A7	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P8 Almost intact, parts of antennae missing
Mycetophilidae/ Sciophilinae	ORI1_ A8	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P11 Almost intact, one leg missing
Mycetophilidae/ Sciophilinae	ORI1_ A9	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P12 Legs missing
Mycetophilidae/ Sciophilinae	ORI1_ A10	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P13 Almost intact, parts of legs missing
Mycetophilidae/ Sciophilinae	ORI1_ A11	<i>S. borneense</i> Bechev & Kazandzhieva 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P14 Intact
Mycetophilidae/ Sciophilinae	ORI1_ A12	<i>S. borneense</i> Bechev & Kazandzhieva 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P15 Almost intact, parts of legs missing
Mycetophilidae/ Sciophilinae	ORI1_ A13	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P16 Almost intact, parts of legs missing

The fungus gnats (Diptera: Sciarioidea) collection...

Mycetophilidae/ Sciophilinae	ORI1_ A14	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P17 Head, wings and parts of legs missing
Mycetophilidae/ Sciophilinae	ORI1_ A15	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P18 Terminalia in microvial with the specimen
Mycetophilidae/ Sciophilinae	ORI1_ A16	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P10 Intact, one tarsus missing
Mycetophilidae/ Sciophilinae	ORI1_ A17	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P9 Almost intact, parts of antennae and legs missing
Mycetophilidae/ Sciophilinae	ORI1_ A18	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P1 Almost intact, parts of antennae and legs missing
Mycetophilidae/ Sciophilinae	ORI2_ A19	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P19 Wings slide- mounted in Euparal
Mycetophilidae/ Sciophilinae	ORI2_ A20	<i>S. borneense</i> Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P20 Terminalia stored with the specimen, wings slide- mounted in Euparal
Mycetophilidae/ Gnoristinae	ORI2_ PDZ1	<i>Dziedzickia</i> <i>pectinata</i> Sevcik, Bechev & Hippa, 2011	par	1♂	THAILAND: Nakhon Nayok: Khao Yai N. P., PA TABAK, 17- 28.4.2001	n/a
Mycetophilidae/ Gnoristinae	ORI2_ PDZ4	<i>Dziedzickia</i> <i>pectinata</i> Sevcik, Bechev & Hippa, 2011	par	4♂, 1♀	THAILAND: Nakhon Nayok, Khao Yai N. P. Khao - Kheo, 17- 28.4.2001	n/a
Mycetophilidae/ Gnoristinae	ORI2_ PDZ2	<i>Dziedzickia</i> <i>bifida</i> Sevcik, Bechev & Hippa, 2011	par	1♂	MALAYSIA: Hulu, Perak, Belum Expedition, B. Camp, I. Sivec leg., light trap	n/a

Mycetophilidae/ Gnoristinae	ORI2_ PDZ3	<i>Dziedzickia bifida</i> Sevcik, Bechev & Hippa, 2011	par	1♂	THAILND: Chiang Dao Wildlife Research Station, 12- 13.5.2004, Sivec & Horvat leg.	n/a
Bolitophilidae	OR1_ B2	<i>Bolitophila japonica</i> Okada, 1934	No	1♂	NEPAL: Parvat, Ghorepani, 2860 m, in Rhododendron forest, 13.10.2006, leg. D. Bechev, ♂	n/a
Bolitophilidae	OR1_ B3	<i>Bolitophila japonica</i> Okada, 1934	No	2♂	NEPAL: Parvat, Ghorepani, 2860 m, in Rhododendron forest, 13.10.2006, leg. D. Bechev, 2 ♂	n/a
Mycetophilidae/ Sciophilinae	OR1_ B1	<i>Eudicrana</i> sp.	No	1♀	MALAYSIA: Sabah, Kinabalu NP, 23.7.2019; leg. Kazandzhieva	n/a
Mycetophilidae/ Leiinae	ORI2_ AL01	<i>Allactoneura argentosquamosa</i> (Enderlein, 1910)	No	1♂	THAILAND: Chiangmai, Zoo; 21-28.05.1988; leg. Chantaramongkol	det. D. Bechev, 2022 Terminalia strongly lightened
Mycetophilidae/ Leiinae	ORI2_ AL02	<i>Allactoneura cincta</i> De Meijere, 1907	No	1♂	INDONESIA: N. Sumatra, W Pematang Siantar, 750 m; 23.02.1994; Leg Sivec, I.	det. D. Bechev, 2022

Discussion

During the collecting period (1981-2000s), the collection was supplemented without systematic revision of samples or taxonomic re-evaluation.

As the most extensive collection of its kind in the country, it requires a reassessment in light of recent taxonomic advancements. Unidentified specimens should be formally identified, and further research is needed on materials from Greece, Turkey, and the Oriental region. Given the ongoing refinement of species concepts through the study of type specimens, additional

materials and molecular genetics, certain designations may be inaccurate and require critical assessment.

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