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The fungus gnats (Diptera: Sciaroidea) 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.

Keywords: fungus gnats, collection, Mycetophilidae, Bulgaria, Greece, Oriental.

Introduction

Fungus gnats are representatives of the families Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae (Diptera: Sciaroidea). 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 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, Sinemorets.

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 (Kerpoplatidae, *Macerocera* from Rhodopes), DB53 (Mycetohpilidae, NE, SE Bulgaria, Rhodopes), DB54 (Mycetohpilidae 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 (Mycetohpilidae, *Azana* from Greece, Rila), DB63 (Sciaridae), DB64 (Mycetohpilidae, *Brevicornu*), DB65 (Mycetophilidae), DB66 (Mycetophilidae,

Zygomyia, *Phronia*), DB67 (Mycetophilidae from Rhodopes, Rila), DB68 (Mycetophilidae, Gnoristini, Sciophilini, Leiini), DB69 (Mycetophilidae, *Mycomya*, *Neoempheria*) DB70 (Mycetohpilidae, *Allodia*).

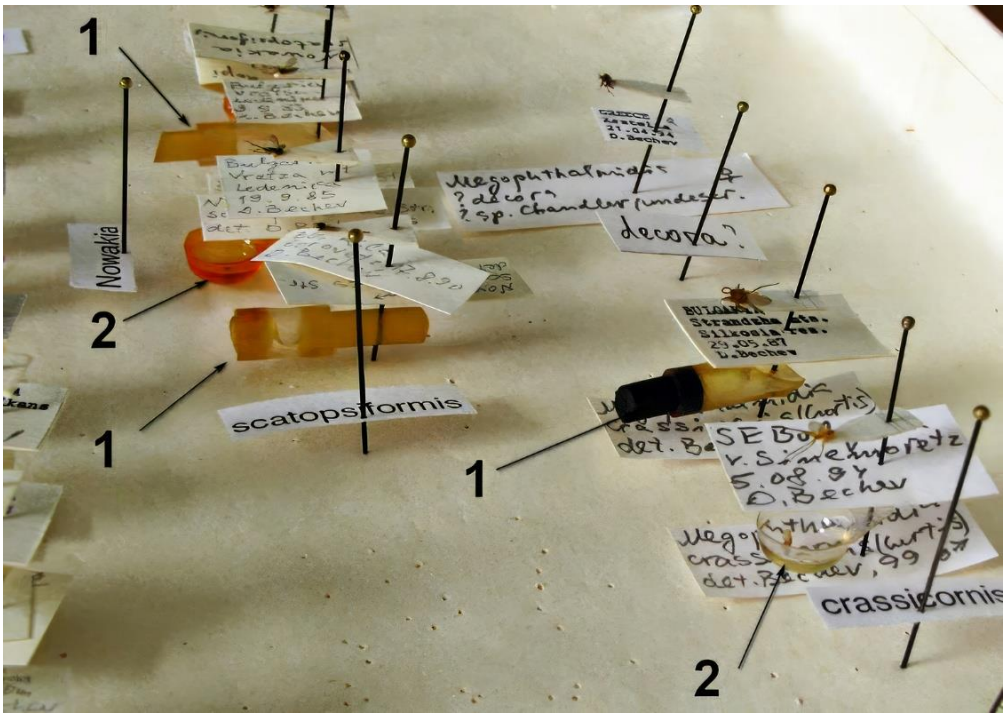

Fig. 2. Storage of genitalia in welded nylon tubes with rubber stoppers (1) and plastic blister cavities (2). Photograph: Dimitar Bechev.

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	*Bolitophila* (*Bolitophila*) *basicornis* (Mayer, 1951)	DB01	
	Bolitophila (*Bolitophila*) *cinerea* Meigen, 1818	DB01	Box 23
	Bolitophila (*Bolitophila*) *saundersi* (Curtis, 1836)	DB01	Box 23
	Bolitophila (*Bolitophila*) *tenella* Winnertz, 1863	DB01	
	Bolitophila (*Cliopisa*) *fumida* Edwards, 1941	DB01	
	Bolitophila (*Cliopisa*) *hybrida* (Meigen, 1804)	DB01	

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

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

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

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

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

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

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

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

	Neuratelia minor (Lundström, 1912)	DB 28	Box 23
	Neuratelia nemoralis (Meigen, 1818)	DB 28	Box 23
	Paratinia sciarina Mik, 1874	DB 28	
	Phthinia humilis Winnertz, 1863	DB 28	
	Phthinia winnertzi Mik, 1869	DB 28	
	Polylepta guttiventris (Zetterstedt, 1852)	DB 28	
	Polylepta borealis Lundstrom, 1912	DB 28 (Russia)	
	Sciophila baltica Zaitzev, 1982	DB 28	Box 21, 23
	Sciophila fenestella Curtis, 1837	DB 28	
	Sciophila hirta Meigen, 1818	DB 28	
	Sciophila lutea Macquart, 1826	DB 28	Box 21, 23
	Sciophila nonnisilva Hutson, 1979	DB 28	
	Sciophila rufa Meigen, 1830	DB 28	Box 21, 23
	Sciophila thoracica Staeger, 1840 as *quadriterga*	DB 28	Box 23
	Speolepta leptogaster (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	*S. borneense* Bechev & Kazandzhieva, 2020	**hol**	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; Leg. Kazandzhieva	*Holotype Intact, wings folded
Keroplatidae/ Orfeliini	ORI2_ HOL2	*Chetoneura lagangensis* Kazandzhieva & Bechev, 2022	**hol**	1♂	MALAYSIA: Sarawak, Gunung Mulu NP, Lagang cave; 14.7.2019, leg. Kazandzhieva, sweep net	*Holotype Terminali a in microvial with the specimen
Mycetophilidae / Gnoristinae	ORI2_ HOL3	*Dziedzickia longistyla* Bechev & Kazandzhieva 2023	**hol**	1♂	MALAYSIA: Malaysia: Sarawak, Kubah NP, leg. Kazandzhieva	n/a
Mycetophilidae / Sciophilinae	ORI1_ A1	*Stenophragma borneense* 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	*S. borneense* Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P3 Almost intact, parts of legs missing

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

Mycetophilidae/ Sciophilinae	ORI1_ A14	*S. borneense* 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	*S. borneense* 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	*S. borneense* Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P10 Intact, one tarsus missing
Mycetophilidae/ Sciophilinae	ORI1_ A17	*S. borneense* 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	*S. borneense* 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	*S. borneense* Bechev & Kazandzhieva, 2020	par	1♂	MALAYSIA: Sarawak, Kubah NP, 21.7.2019; leg. Kazandzhieva	P19 Wings slide-mounted in Euparal
Mycetophilidae/ Sciophilinae	ORI2_ A20	*S. borneense* 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	*Dziedzickia pectinata* 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	*Dziedzickia pectinata* 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	*Dziedzickia bifida* Sevcik, Bechev & Hippa, 2011	par	1♂	MALAYSIA: Hulu, Perak, Belum Expedition, B. Camp, I. Sivec leg., light trap	n/a

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