

Fungus gnats (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae) of Vrachanska Planina Mountains

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Abstract. Till now, 162 species of fungus gnats are found in Vrachanska Planina Mts.. Three new to the fauna of Bulgaria and to the mountain species are reported here: *Docosia lastovkai*, *D. muranica* and *D. nigra*.

Key words: fungus gnats, Western Stara Planina, Bulgaria.

Introduction

All available faunistic data about the fungus gnat fauna of Bulgaria up to 2010 is summarised by Bechev (2006, 2010). By adding a new species described by Bechev & Pavlova (2012) the total number of species known to the country is 313.

Material and Methods

This paper includes all the published data about fungus gnats of Vrachanska Planina Mountains and three new to the fauna of Bulgaria and to the mountain species of the genus *Docosia* Winnertz, 1863.

Information for the localities

Locality	Type locality	UTM	Altitude Min	Altitude Max in m a.s.l.	Vegetation belts	Dominant trees
Borov Kamak	pl	GN08		700	MB	<i>Fagus sylvatica</i>
Druzhevo	v	FN98		900	MB	
Gorna Byala Rechka	v	FN98		800	MB	
Gorno Ozirovo	v	FN98		700	MB	
Ledenika	h	GN08		800	MB	<i>Fagus sylvatica</i>
Matnitsa	pl	FN99		350	XO	<i>Quercus</i> spp.
Ochin Dol	v	GN07	550	600	MOH	
Parshevitsa	h	GN08		1250	MB	<i>Fagus sylvatica</i>
Rebarkovo	v	GN27		250	XO	
Reznyovete	c	GN08		800	MB	
Vratsa	t	GN08		350	XO	
Zgorigrad (over)	v	GN08	600	650	MB	<i>Fagus sylvatica</i>

Abbreviations: **c** = cave **h** = hut, **pl** = place, **E** of =East of, **t** = town, **v** = village, XO = xerothermic oak forests, MB = mesophilous beech forests, MOH = mesophilous oak-hornbeam forests

Species list

Bolitophilidae***Bolitophila (Bolitophila) cinerea* Meigen, 1818**

GN08: Parshevitsa.

***Bolitophila (Bolitophila) saundersii* (Curtis, 1836)**

GN08: Zgorigrad; Parshevitsa.

***Bolitophila (Cliopisa) fumida* Edwards, 1941**

GN08: Parshevitsa.

***Bolitophila (Cliopisa) pseudohybrida* Landrock, 1912**

FN99: Matnitsa; GN08: Vratsa.

Diadocidiidae***Diadocidia (Diadocidia) ferruginosa* (Meigen, 1830)**

FN99: Matnitsa; GN08: Zgorigrad; Parshevitsa; Ledenika.

Ditomyiidae***Ditomyia fasciata* (Meigen, 1818)**

GN08: Vratsa; Parshevitsa.

Keroplastidae**Keroplastinae****Keroplastini*****Cerotelion racovitzai* Matile et Burghеле-Balacesco, 1969**

GN08: Zgorigrad.

***Cerotelion striatum* (Gmelin, 1790)**

GN08: Vratsa.

***Keroplatus reaumurii* Dufour, 1839**

GN08: Vratsa.

***Keroplatus testaceus* Dalman, 1818**

GN08: Vratsa.

Orfeliini***Isoneuromyia semirufa* (Meigen, 1818)**

FN99: Matnitsa.

***Monocentrotia matilei* Bechev, 1989**

GN08: Vratza.

***Neoplatyura nigricauda* (Strobl, 1893)**

FN99: Matnitsa.

***Orfelia bezzii* (Strobl, 1909)**

GN08: Vratsa.

***Orfelia lugubris* (Zetterstedt, 1851)**

GN08: Vratsa.

***Orfelia nigricornis* (Fabricius, 1805)**

GN08: Vratsa.

***Orfelia ochracea* (Meigen, 1818)**

GN08: Vratsa.

***Pyratula perpusilla* (Edwards, 1913)**

FN98: Druzhevo (E of Druzhevo); GN08: Vratsa.

***Pyratula zonata* (Zetterstedt, 1855)**

GN08: Vratsa.

Macrocerinae***Macrocera anglica* Edwards, 1925**

FN99: Matnitsa.

***Macrocera angulata* Meigen, 1818**

GN08: Vratsa.

***Macrocera centralis* Meigen, 1818**

FN98: Druzhevo; GN08: Ledenika.

***Macrocera crassicornis* Winnertz, 1863**

GN08: Vratsa.

***Macrocera fasciata* Meigen, 1804**

FN99: Matnitsa; GN08: Vratsa; Ledenika; Parshevitsa.

***Macrocera nigricoxa* Winnertz, 1863**

GN08: Vratsa.

***Macrocera parva* Lundström, 1914**

GN08: Zgorigrad.

***Macrocera phalerata* Meigen, 1818**

FN99: Matnitsa; GN08: Vratsa; Parshevitsa.

***Macrocera pilosa* Landrock, 1917**

GN08: Ledenika.

***Macrocera stigma* Curtis, 1837**

GN08: Ledenika; Parshevitsa.

***Macrocera vittata* Meigen, 1830**

FN98: Druzhevo; GN08: Zgorigrad.

Mycetophilidae**Mycomyinae*****Mycomya (Cymomya) circumdata* (Staeger, 1840)**

GN08: Parshevitsa.

***Mycomya (Mycomya) cinerascens* (Macquart, 1826)**

GN08: Ledenika.

***Mycomya (Mycomya) marginata* (Meigen, 1818)**

FN99: Matnitsa; GN07: Ochin Dol; GN08: Zgorigrad; Borov Kamak; Vratsa.

***Mycomya (Mycomya) occultans* (Winnertz, 1863)**

GN08: Vratsa.

***Mycomya (Mycomya) parva* (Dziedzicki, 1885)**

GN08: Parshevitsa.

***Mycomya (Mycomya) tenuis* (Walker, 1856)**

FN99: Matnitsa; GN08: Parshevitsa.

***Mycomya (Mycomya) tridens* (Lundström, 1911)**

GN08: Parshevitsa; Vratsa; Zgorigrad; Ledenika.

***Mycomya (Mycomya) winnertzi* (Dziedzicki, 1885)**

FN99: Matnitsa.

***Mycomya (Mycomyopsis) trilineata* (Zetterstedt, 1838)**

FN99: Matnitsa.

***Neoempheria proxima* (Winnertz, 1863)**

FN99: Matnitsa.

***Neoempheria striata* (Meigen, 1818)**

GN08: Vratsa.

Gnoristinae***Boletina anderschi* (Stannius, 1831)**

GN08: Ledenika.

***Boletina basalis* (Meigen, 1818)**

GN08: Parshevitsa.

***Boletina gripha* Dziedzicki, 1885**

FN98: Gorna Byala Rechka; FN99: Matnitsa; GN08: Parshevitsa; Borov Kamak.

***Boletina lundstroemi* Landrock, 1912**

FN98: Gorna Byala Rechka.

***Boletina nigricoxa* Staeger, 1840**

GN08: Ledenika; Vratsa.

***Boletina nitida* Grzegorzek, 1885**

FN99: Matnitsa.

***Boletina sciarina* Staeger, 1840**

GN08: Vratsa.

***Boletina trivittata* (Meigen, 1818)**

GN08: Parshevitsa.

***Coelosia flava* (Staeger, 1840)**

GN08: Parshevitsa.

***Ectrepesthoneura ledenikiensis* Bechev, 1988**

GN08: Ledenika.

***Grzegorzekia collaris* (Meigen, 1818)**

GN08: Parshevitsa.

***Palaeodocosia vittata* (Coquillett, 1901)**

GN08: Parshevitsa.

***Synapha vitripennis* (Meigen, 1818)**

FN99: Matnitsa; GN08: Parshevitsa.

***Tetragoneura ambigua* Grzegorzek, 1885**

GN08: Borov Kamak; Parshevitsa.

Sciophilinae***Acnemia falcata* Zaitzev, 1982**

FN98: Gorna Byala Rechka.

***Acnemia longipes* Winnertz, 1863**

FN99: Matnitsa.

***Acnemia nitidicollis* (Meigen, 1818)**

FN99: Matnitsa; GN08: Parshevitsa.

***Acnemia vrazzatica* Bechev, 1985**

GN08: Zgorigrad.

***Anaclileia beshovskii* Bechev, 1990**

GN08: Parshevitsa.

***Megalopelma nigroclavatum* (Strobl, 1910)**

GN08: Parshevitsa; Vratsa.

***Monoclona rufilatera* (Walker, 1837)**

N99: Matnitsa.

***Neuratelia minor* (Lundström, 1912)**

GN08: Ledenika; Parshevitsa.

***Neuratelia nemoralis* (Meigen, 1818)**

GN08: Parshevitsa.

***Phthinia humilis* Winnertz, 1863**

GN07: Ochin Dol; GN08: Ledenika; Parshevitsa.

***Sciophila baltica* Zaitzev, 1982**

GN08: Parshevitsa.

***Sciophila lutea* Macquart, 1826**

FN99: Matnitsa; GN08: Vratsa; Parshevitsa.

***Sciophila nonnisilva* Hutson, 1979**

FN99: Matnitsa.

***Sciophila thoracica* Staeger, 1840**

FN99: Matnitsa.

***Speolepta leptogaster* (Winnertz, 1863)**

GN08: Vratsa.

Leiinae

***Docosia gilvipes* (Walker, 1856)**

FN99: Matnitsa; GN08: Borov Kamak.

***Docosia lastovkai* Chandler, 1994**

GN08: Ledenika, 20.06.1984, 1♂.

***Docosia moravica* Landrock, 1916**

GN08: Vratsa.

***Docosia muranica* Kurina & Ševčík, 2011**

GN08: Ledenika, 20.04.1984, 1♂.

***Docosia nigra* Landrock, 1918**

GN08: Zgorigrad, 13.04.1984, 1♂.

***Leia bimaculata* (Meigen, 1804)**

FN99: Matnitsa; GN07: Ochin Dol; GN08: Vratsa; Parshevitsa; GN17: Rebarkovo.

***Leia cylindrica* (Winnertz, 1863)**

FN99: Matnitsa; GN08: Vratsa.

***Leia winthemii* Lehmann, 1822**

GN08: Parshevitsa.

***Novakia scatopsiformis* Strobl, 1893**

GN08: Ledenika.

***Rondaniella dimidiata* (Meigen, 1804)**

GN08: Parshevitsa.

Mycetophilinae

Exechiini

***Allodia (Allodia) lugens* Wiedemann, 1817**

FN99: Matnitsa; GN08: Parshevitsa; Ledenika; Zgorigrad.

***Allodia (Allodia) ornaticollis* (Meigen, 1818)**

FN99: Matnitsa.

***Allodia (Brachicampta) alternans* (Zetterstedt, 1838)**

FN99: Matnitsa; GN08: Parshevitsa; Vratsa; Ledenika.

***Allodia (Brachycampta) barbata* (Lundström, 1909)**

FN99: Matnitsa.

***Allodia (Brachycampta) foliifera* (Strobl, 1910)**

GN08: Vratsa.

***Allodia (Brachycampta) grata* (Meigen, 1830)**

FN99: Matnitsa; GN07: Ochin Dol; GN08: Zgorigrad; Ledenika; Parshevitsa.

***Allodia (Brachycampta) neglecta* Edwards, 1925**

GN07: Ochin Dol; GN08: Vratsa.

- Allodia (Brachycampta) pistillata* (Lundström, 1911)**
FN99: Matnitsa; GN08: Parshevitsa; Vratsa.
- Allodia (Brachycampta) silvatica* (Landrock, 1912)**
GN08: Vratsa.
- Allodia (Brachycampta) triangularis* (Strobl, 1895)**
FN99: Matnitsa.
- Allodia (Brachycampta) westerholti* Caspers, 1980**
GN08: Ledenika.
- Allodiopsis domestica* (Meigen, 1830)**
GN08: Parshevitsa.
- Allodiopsis rustica* (Edwards, 1941)**
FN99: Matnitsa; GN08: Ledenika; Vratsa; Borov Kamak; Zgorigrad.
- Anatella simpatica* Dziedzicki, 1923**
GN08: Zgorigrad.
- Brevicornu (Brevicornu) fissicauda* (Lundström, 1911)**
FN99: Matnitsa; GN08: Parshevitsa; Vratsa.
- Brevicornu (Brevicornu) griseicolle* (Staeger, 1840)**
FN98: Gorna Byala Rechka; FN99: Matnitsa; GN08: Parshevitsa; Borov Kamak; Zgorigrad.
- Brevicornu (Brevicornu) sericoma* (Meigen, 1830)**
FN98: Gorna Byala Rechka; FN99: Matnitsa; GN07: Ochin Dol; GN08: Vratsa; Parshevitsa; Ledenika.
- Cordyla crassicornis* Meigen, 1818**
FN99: Matnitsa; GN08: Zgorigrad; Vratsa.
- Cordyla fissa* Edwards, 1925**
FN98: Gorna Byala rechka; FN99: Matnitsa; GN08: Parshevitsa; Ledenika.
- Cordyla fusca* Meigen, 1804**
FN99: Matnitsa.
- Cordyla murina* Winnertz, 1863**
FN99: Matnitsa; GN08: Zgorigrad; Vratsa.
- Cordyla nitens* Winnertz, 1863**
FN99: Matnitsa.
- Exechia bicincta* (Staeger, 1840)**
FN99: Matnitsa; GN08: Ledenika; Parshevitsa; Vratsa; Borov Kamak.
- Exechia dorsalis* (Staeger, 1840)**
GN08: Ledenika.
- Exechia exigua* Lundström, 1909**
GN08: Parshevitsa; Vratsa.
- Exechia fulva* Santos Abreu, 1920**
GN08: Parshevitsa.
- Exechia fusca* (Meigen, 1804)**
FN98: Druzhevo; Gorna Byala Rechka; FN99: Matnitsa; GN08: Vratsa; Parshevitsa; Ledenika.
- Exechia lundstroemi* Landrock, 1923**
GN08: Ledenika.

***Exechia separata* Lundström, 1912**

GN08: Parshevitsa; Vratsa.

***Exechia seriata* (Meigen, 1830)**

FN99: Matnitsa; GN08: Ledenika; Parshevitsa; Zgorigrad (above of).

***Exechiopsis (Exechiopsis) furcata* (Lundström, 1912)**

GN08: Parshevitsa; Reznyovete.

***Exechiopsis (Exechiopsis) indecisa* (Walker, 1856)**

GN08: Reznyovete.

***Exechiopsis (Exechiopsis) intersecta* (Meigen, 1818)**

GN08: Ledenika.

***Exechiopsis (Exechiopsis) magnicauda* (Lundström, 1911)**

GN08: Ledenika; Parshevitsa.

***Exechiopsis (Exechiopsis) vizzavonensis* (Edwards, 1928)**

GN08: Reznyovete.

***Pseudobrachypeza helvetica* (Walker, 1856)**

GN08: Zgorigrad.

***Rymosia affinis* Winnertz, 1863**

GN08: Parshevitsa; Vratsa.

***Rymosia fasciata* (Meigen, 1804)**

GN08: Ledenika.

***Rymosia spinipes* Winnertz, 1863**

GN08: Ledenika.

***Synplasta gracilis* (Winnertz, 1863)**

GN08: Parshevitsa.

***Synplasta exclusa* (Dziedzicki, 1889)**

GN08: Zgorigrad.

***Tarnania fenestralis* (Meigen, 1818)**

GN08: Ledenika; Vratsa; Reznyovete; Parshevitsa.

Mycetophilini

***Dynatosoma fuscicorne* (Meigen, 1818)**

GN08: Vratsa; Ledenika.

***Dynatosoma majus* Landrock, 1912**

FN99: Matnitsa; GN08: Vratsa.

***Epicypta torquata* Matile, 1977**

FN99: Matnitsa.

***Mycetophila alea* Laffoon, 1965**

FN99: Matnitsa; GN08: Ledenika; Parshevitsa.

***Mycetophila bialorussica* Dziedzicki, 1884**

GN08: Ledenika.

***Mycetophila blanda* Winnertz, 1863**

GN08: Vratsa; Parshevitsa; Ledenika.

***Mycetophila confluens* Dziedzicki, 1884**

GN08: Parshevitsa; Ledenika.

***Mycetophila czizeki* Landrock, 1911**

FN99: Matnitsa; GN07: Ochinn Dol.

***Mycetophila distigma* Meigen, 1830**

GN08: Vratsa.

***Mycetophila edwardsi* Lundström, 1913**

GN08: Vratsa; Parshevitsa; Zgorigrad (above of).

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

FN98: Gorna Byala Rechka; FN99: Matnitsa; GN08: Parshevitsa; Ledenika; Vratsa.

***Mycetophila luctuosa* Meigen, 1830**

FN98: Gorna Byala Rechka; FN99: Matnitsa; GN07: Ochin Dol.

***Mycetophila marginata* Winnertz, 1863**

FN99: Matnitsa; GN08: Ledenika; Vratsa; Parshevitsa; Zgorigrad.

***Mycetophila morosa* Winnertz, 1863**

GN08: Parshevitsa.

***Mycetophila ocellus* Walker, 1848**

FN98: Gorna Byala Rechka; FN99: Matnitsa; GN08: Ledenika; Parshevitsa; Vratsa.

***Mycetophila ornata* Stephens, 1829**

GN08: Vratsa; Ledenika.

***Mycetophila pumila* Winnertz, 1863**

FN99: Matnitsa.

***Mycetophila signatoides* Dziedzicki, 1884**

GN07: Ochin Dol.

***Mycetophila spectabilis* Winnertz, 1863**

FN99: Matnitsa; GN08: Parshevitsa; Vratsa; Zgorigrad.

***Mycetophila stolidus* Walker, 1856**

GN08: Ledenika.

***Mycetophila trinotata* Staeger, 1840**

GN08: Vratsa; Parshevitsa; Zgorigrad.

***Phronia biarcuata* (Becker, 1908)**

GN08: Vratsa.

***Phronia cinerascens* Winnertz, 1863**

GN08: Vratsa.

***Phronia conformis* (Walker, 1856)**

FN99: Matnitsa; GN07: Ochin Dol.

***Phronia egregia* Dziedzicki, 1889**

GN07: Ochin Dol.

***Phronia nitidiventris* (van der Wulp, 1858)**

GN07: Ochin Dol.

***Phronia obtusa* Winnertz, 1863**

GN08: Vratsa; Ledenika.

***Phronia signata* Winnertz, 1863**

GN07: Ochin Dol.

***Phronia strenua* Winnertz, 1863**

GN07: Ochin Dol.

***Sceptonia cryptocauda* Chandler, 1991**

GN08: Ledenika; Zgorigrad.

***Sceptonia humerella* Edwards, 1941**

GN08: Ledenika.

***Sceptonia membranacea* Edwards, 1925**

GN07: Ochin Dol; GN08: Vratsa; Zgorigrad.

***Sceptonia nigra* (Meigen, 1804)**

GN08: Parshevitsa; Ledenika; Vratsa.

***Sceptonia pilosa* Bukowski, 1934**

FN99: Matnitsa.

***Sceptonia tenuis* Edwards, 1925**

GN08: Parshevitsa.

***Trichonta beata* Gagné, 1981**

GN08: Zgorigrad.

***Trichonta falcata* Lundström, 1911**

FN99: Matnitsa; GN08: Parshevitsa; Vratsa.

***Trichonta fragilis* Gagné, 1981**

GN08: Vratsa; Zgorigrad.

***Trichonta submaculata* (Staeger, 1840)**

GN08: Ledenika.

***Trichonta terminalis* (Walker, 1856)**

GN08: Vratsa.

***Trichonta vitta* (Meigen, 1830)**

FN99: Matnitsa.

***Trichonta vulgaris* Loew, 1869**

GN08: Parshevitsa.

***Zygomyia humeralis* (Wiedemann, 1817)**

GN08: Parshevitsa.

Conclusion

In Vrachanska Planina Mts., 165 species of fungus gnats from 50 genera has been established. Three of them reported here are new to the fauna of Bulgaria: *Docosia lastovkai*, *D. muranica* and *D. nigra*. Endemic species for Vrachanska Planina is *Acnemia vratzatica*, known only from the type locality near Zgorigrad Village. *Ectrepesthoneura ledenikiensis* is known up to now from Bulgaria and Greece only, but is possible to have more widely distribution.

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References

- Bechev, D. (2006) The fungus gnats of the families Bolitophilidae, Diadocidiidae, Ditomyiidae and Keroplatidae (Diptera: Sciaroidea) of Bulgaria. *Scientific Studies of the University of Plovdiv, Biology, Animalia*, 42: 21–83.
- Bechev, D. (2010) On the family Mycetophilidae (Insecta: Diptera) in Bulgaria. *ZooNotes*, Supplement 1, 72.

Bechev, D. & Pavlova, A. (2012) *Greenomyia tomovi* sp. n. from Bulgaria (Diptera: Mucetophilidae: Leiinae) and a key to the Palaearctic species of the genus. Acta zoologica bulgarica, 64, 2: 109–111.

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**Гъбни комари (Diptera: Bolitophilidae, Diadocidiidae,
Ditomyiidae, Keroplatidae and Mucetophilidae) на
Врачанска планина**

ДИМИТЪР БЕЧЕВ, АНЕЛИЯ ПАВЛОВА

(Резюме)

Представена е фаунистична информация за всичките 165 вида гъбни комари (от 5 семейства и 50 рода) известни досега за Врачанска планина. От тях 3 вида, *Docosia lastovkai*, *D. muranica* и *D. nigra*, са съобщени тук за първи път за фауната на България. Ендемичен за планината е *Acnemia vratsatica*, известен досега само от типовото находище край Згориград.