

**THE FUNGUS GNATS OF THE FAMILIES BOLITOPHILIDAE,
DIADOCIDIIDAE, DITOMYIIDAE AND KEROPLATIDAE
(DIPTERA: SCIAROIDEA) OF BULGARIA**

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Abstract. Faunistic data and distributional maps for 62 fungus gnats species of the families Bolitophilidae, Diadocidiidae, Ditomyiidae and Keroplatidae known to Bulgaria till the year 2006 are represented.

Key words: Diptera, Sciaroidea, Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Bulgaria.

INTRODUCTION

The present work summarized all records of the families Bolitophilidae, Diadocidiidae, Ditomyiidae and Keroplatidae in Bulgaria up to the year 2006 including. They have been updated by including some new distributional data.

MATERIAL AND METHODS

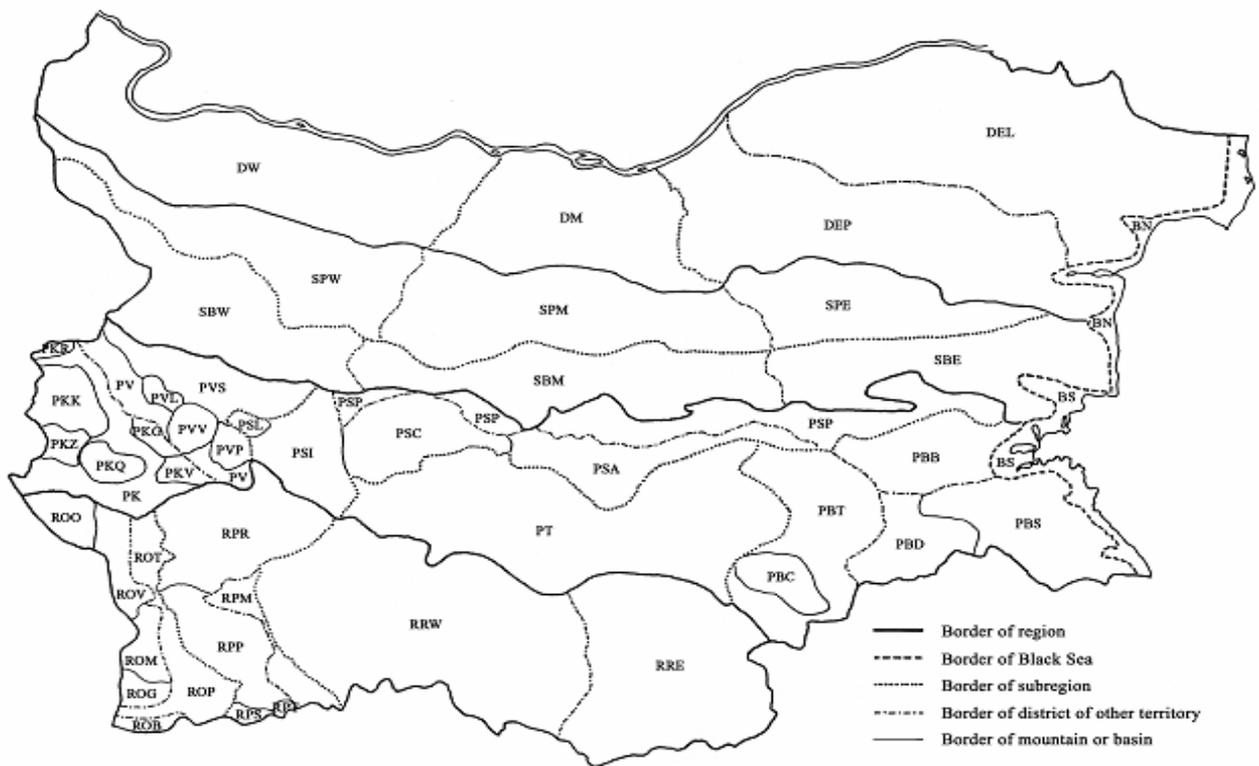
The following information about each of the species is presented: valid taxonomic name, bibliography and synonymy in Bulgaria, horizontal distribution between the geographic regions of Bulgaria with UTM-codes and localities, date and number of specimens, vertical distribution in Bulgaria (in meters and vegetation belts), seasonal activity (months are written by Roman numbers).

The geographic regions of Bulgaria (Fig. 1, Table 1) are after HUBENOV (1997), and vertical vegetation belts (Table 2) after VELCHEV et al. (1982). More information about UTM basic map can be found in ABADJIEV (2001).

Table 1. *Geographic regions of Bulgaria after HUBENOV (1997).*

Abbreviation	Region
BNO	Northern Black Sea coast
BSO	Southern Black Sea coast
DEL	Ludogorie-Dobrudzha district
DEP	Popovo-Provadiya district
DM	Middle Danube Plain
DW	Western Danube Plain
PBB	Bakadzhiksko-Burgas district
PBC	Sakar Mt.
PBD	Strandzhansko-Derventski district
PBS	Strandzha Mt.
PBT	Sakar-Tundzha district
PKG	Golo Bardo Mt.
PKK	Kraishte
PKQ	Konyavska Planina Mt.
PKR	Ruy Mt.
PKV	Verila Mt.
PKZ	Zemenska Planina Mt.
PSA	Sarnena Sredna Gora Mts.
PSC	Sashtinska Sredna Gora Mts.
PSI	Ihtimanska Sredna Gora Mt.
PSL	Lozenska Planina Mt.
PSP	Podbalkan Basin
PTR	Thracean Lowland
PVL	Lyulin Mt.
PVP	Plana Mt.
PVS	Sofia Basin
PVV	Vitosha Mt.
ROB	Belasitsa Mt
ROG	Ograzhden Mt.
ROM	Malashevaska Planina Mt.
ROO	Osogovska Planina Mt.
ROP	Krupnik-Sandanski-Petrich Valley
ROT	Boboshevsko-Simitli Valley
ROV	Vlahina Planina Mt.
RPM	Mesta Valley
RPP	Pirin Mt.
RPR	Rila Mt.
RPS	Slavyanka Mt.
RPT	Stargach Mt.

RRE	East Rhodope Mts.
RRW	West Rhodope Mts.
SBE	East Stara Planina Mts.
SBM	Middle Stara Planina Mts.
SBW	West Stara Planina Mts.
SPE	Eastern Predbalkan
SPM	Middle Predbalkan
SPW	Western Predbalkan



Фиг 1. *Geographic regions of Bulgaria after HUBENOV (1997).*

Table 2. Vertical vegetation belts in Bulgaria after Velchev et al. (1982).

Belt	Abbreviations	Altitude (m)	Dominant plant species
Xerothermic oak forests	XO	up to 700	<i>Quercus ceris</i> , <i>Q. frainetto</i> , <i>Q. virgiliana</i> etc.
Mesophilous oak-hornbeam forests	MOH	from 600–700 to 900-1000	<i>Quercus dalechampii</i> , <i>Carpinus betulus</i> etc.
Mesophilous beech forests	MB	from 900–1000 to 1300–1500	<i>Fagus sylvatica</i>
Coniferous forests	CF	from 1300–1500 to 2000–2200	<i>Pinus sylvestris</i> , <i>Picea abies</i> , <i>Pinus peuce</i> , <i>P. heldreichii</i>
Subalpine vegetation	SA	from 2000–2200 to 2500	<i>Pinus mugo</i> , <i>Juniperus sibirica</i>
Alpine vegetation	A	from 2500 to 2925	alpine grass formations

ACKNOWLEDGMENTS

I due my thanks to my colleagues Dr. Stanislav Abadjiev for the electronical variant of UTM map of Bulgaria and Dr. Gergin Blagoev for the map of geographic regions of Bulgaria.

I thank the authorities of FSI – University of Plovdiv (Project 07-B-9) for financial support.

LIST OF THE TAXA

Family BOLITOPHILIDAE

Genus *Bolitophila* Meigen, 1818

Bolitophila (Bolitophila) basicornis (Mayer, 1951)

Bolitophila (Bolitophila) cinerea Meigen, 1818

Bolitophila (Bolitophila) saundersii (Curtis, 1836)

Bolitophila (Bolitophila) tenella Winnertz, 1863

Bolitophila (Cliopisa) fumida Edwards, 1941

Bolitophila (Cliopisa) hybrida (Meigen, 1804)

Bolitophila (Cliopisa) maculipennis Walker, 1836

Bolitophila (Cliopisa) occlusa Edwards, 1913

Bolitophila (Cliopisa) pseudohybrida Landrock, 1912

Bolitophila (Cliopisa) rossica Landrock, 1912

Family DIADOCIDIIDAE

Genus *Diadocidia* Ruthe, 1831

Diadocidia (Adidocidia) valida Mik, 1874

Diadocidia (Diadocidia) ferruginosa (Meigen, 1830)

Diadocidia (Diadocidia) spinosula Tollet, 1948

Family DITOMYIIDAE

Genus *Ditomyia* Winnertz, 1846

Ditomyia fasciata (Meigen, 1818)

Genus *Symmerus* Walker, 1848

Symmerus annulatus (Meigen, 1830)

Family KEROPLATIDAE

Subfamily KEROPLATINAE

Tribe Keroplatini

Genus *Cerotelion* Rondani, 1856

Cerotelion racovitzai Matile et Burghele-Balacesco, 1969

Cerotelion striatum (Gmelin, 1790)

Genus *Keroplatus* Bosc, 1792

Keroplatus reaumurii Dufour, 1839

Keroplatus testaceus Dalman, 1818

Keroplatus tipuloides Bosc, 1792

Tribe Orfeliini

Genus *Antlemon* Haliday in Loew, 1871

Antlemon (Antlemonopsis) brevimanum (Loew, 1871)

Genus *Ioneuromyia* Brunetti, 1912

Ioneuromyia semirufa (Meigen, 1818)

Genus *Macrorrhyncha* Winnertz, 1846

Macrorrhyncha collarti (Tollet, 1955)

Macrorrhyncha flava Winnertz, 1846

- Macrorrhyncha veleka* Bechev, 1992
Genus *Monocentrota* Edwards, 1925
Monocentrota matilei Bechev, 1989
Genus *Neoplatyura* Malloch, 1928
Neoplatyura modesta (Winnertz, 1863)
Neoplatyura nigricauda (Strobl, 1893)
Genus *Orfelia* A. Costa, 1857
Orfelia bezzii (Strobl, 1909)
Orfelia bicolor (Macquart, 1826)
Orfelia discoloria (Meigen, 1818)
Orfelia fasciata (Meigen, 1804)
Orfelia gruevi Bechev, 2002
Orfelia nemoralis (Meigen, 1818)
Orfelia nigricornis (Fabricius, 1805)
Orfelia tristis (Lundström, 1911)
Orfelia unicolor (Staeger, 1840)
Genus *Platyura* Meigen, 1803
Platyura marginata Meigen, 1804
Pyratula oracula Chandler, 1994
Pyratula perpusilla (Edwards, 1913)
Pyratula subcanariae Chandler, 2001
Genus *Pyratula* Edwards, 1929
Pyratula zonata (Zetterstedt, 1855)
Genus *Urytalpa* Edwards, 1929
Urytalpa ochracea (Meigen, 1818)
Urytalpa rhapsodica Chandler, 1995
Subfamily MACROCERINAE
Genus *Macrocera* Meigen, 1803
Macrocera anglica Edwards, 1925
Macrocera angulata Meigen, 1818
Macrocera centralis Meigen, 1818
Macrocera crassicornis Winnertz, 1863
Macrocera fasciata Meigen, 1804
Macrocera fastuosa Loew, 1869
Macrocera gemagea Bechev, 1991
Macrocera grandis Lundström, 1912
Macrocera inversa Loew, 1869
Macrocera kerteszi Lundström, 1911
Macrocera lutea Meigen, 1804
Macrocera nigricoxa Winnertz, 1863
Macrocera parva Lundström, 1914
Macrocera phalerata Meigen, 1818

Macrocera pilosa Landrock, 1917
Macrocera stigma Curtis, 1837
Macrocera stigmoides Edwards, 1925
Macrocera vittata Meigen, 1830

FAUNISTIC LIST

Family BOLITOPHILIDAE
 Genus *Bolitophila* Meigen, 1818
 Subgenus *Bolitophila* s. str.

***Bolitophila (Bolitophila) basicornis* (Mayer, 1951)**

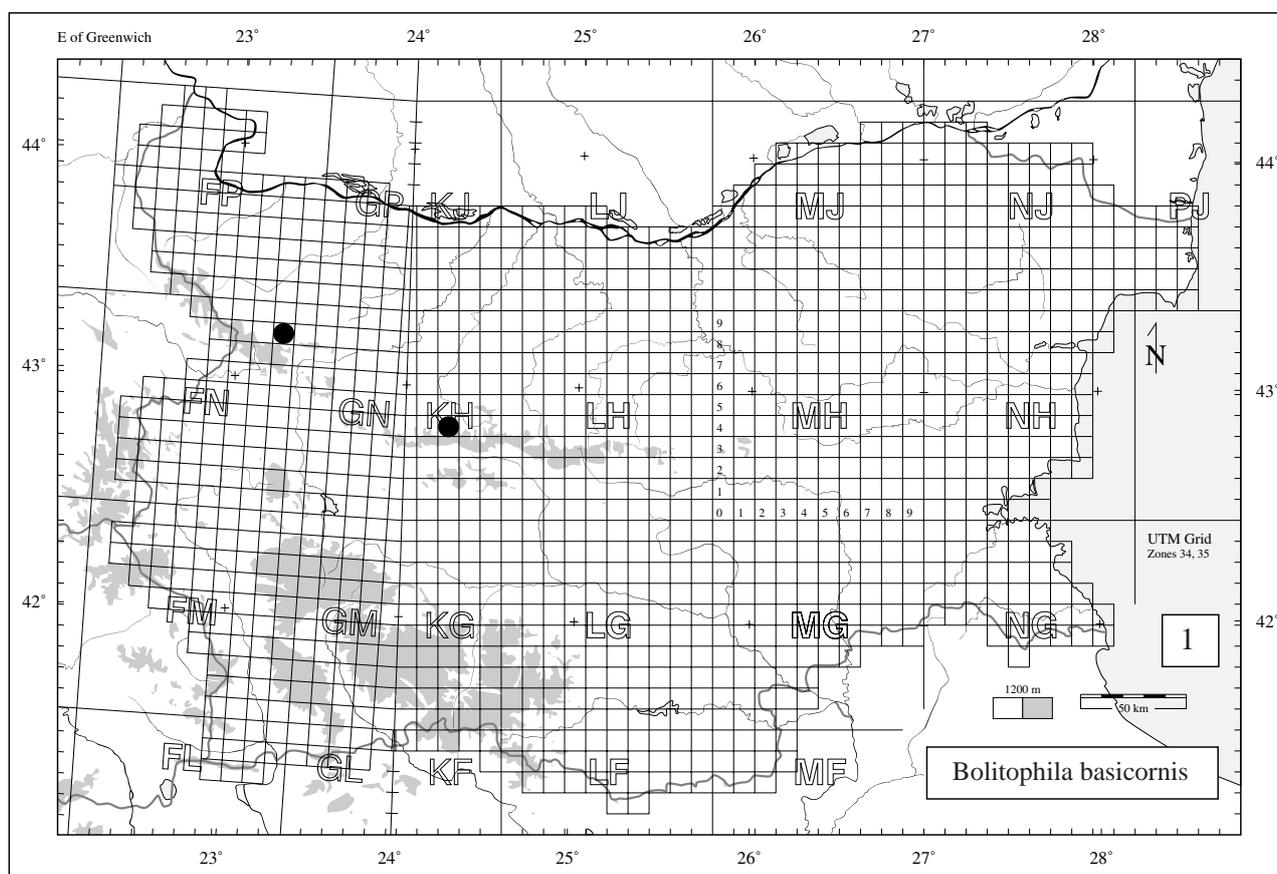
(Map 1)

Bechev, 1989a: 153 (1); 1997: 10; 2000: 56; 2002a: 82.

Localities: SBW: FN88: Byalata voda, 7.10.1983, 1♂ (1). SBM: KH74: Boatian, 6.06.1982, 1♂ (1).

Vertical distribution: 770–1000 m; MB.

Seasonal activity: VI, X.



Bolitophila (Bolitophila) cinerea Meigen, 1818

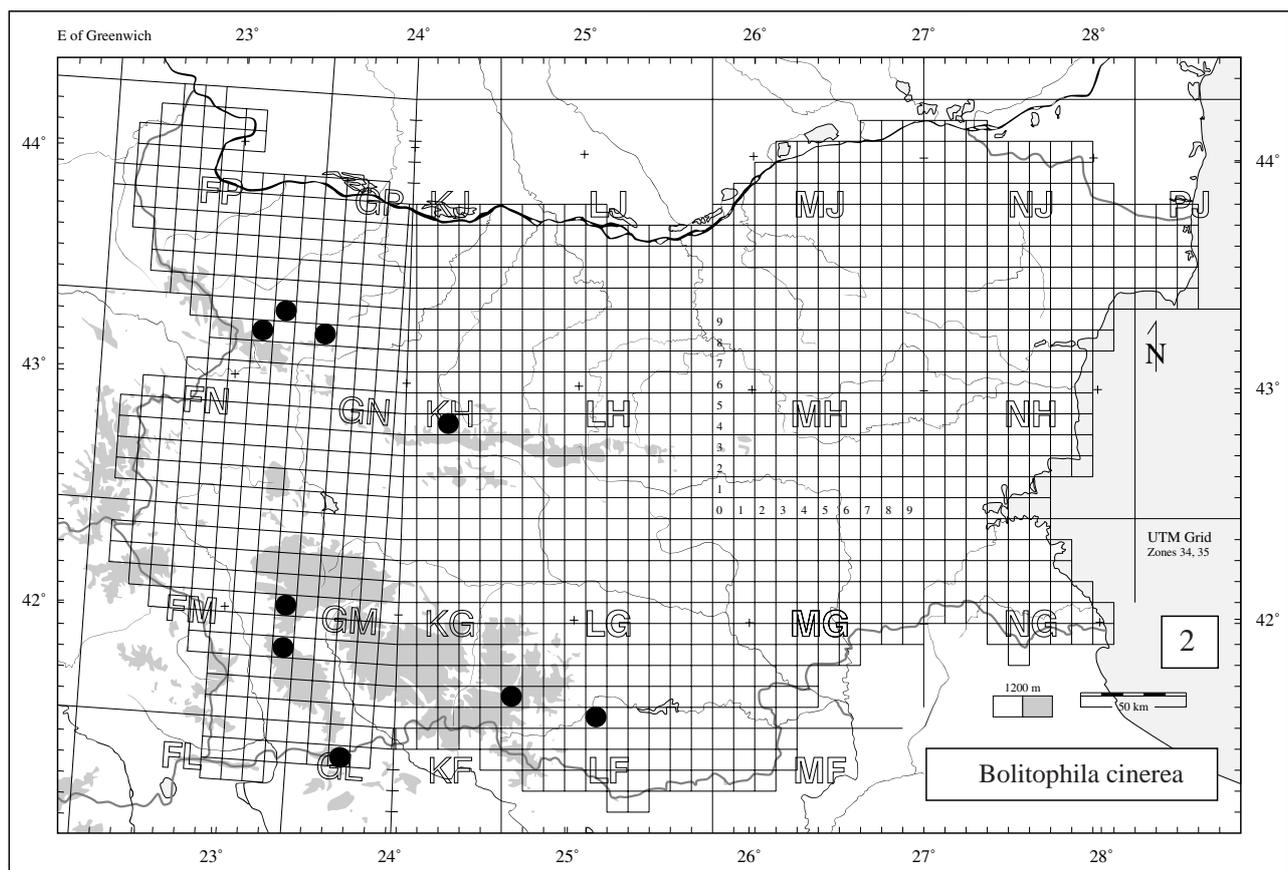
(Map 2)

Bechev, 1986a: 72 (1); 1997: 10; 2000: 56; 2002a: 82; 2004a: 735 (2); 2004b: 132 (3); 2006b: 701 (4).

Localities: SPW: FN89: Parlichevo, 1.05.1992, 2♂ (3). SBW: FN78: Berkovitsa (above of), 23.05.1982, 1♂ (1); 7.04.1983, 1♂ (3); Petrohan, 25.06.1984, 2♂, 70♀ (3); GN08: Parshevitsa, 20.05.1982, 1♂ (3). SBM: KH74: Boatin, 6.06.1982, 2♂ (3); 20.04.1983, 14♂, 1♀ (3); Divchovoto, 22.04.1983, 17♂, 1♀ (3); 25.04.1983, 13♂, 3♀ (3). RPR: FM95: Parangalitsa, 28.8.1989, 1♂ (3). RPP: FM93: Yavorov, 26.07.1985, 2♂ (3). RPS: GL28: Hambar dere, 3.06.1988, 1♂ (3). RRW: LG01: Smolyanski ezera, 27.05.1996, 1♂ (4). RRE: LG40: Ardino, 16.05.1991, 1♂ (2).

Vertical distribution: 300–1500 m; XO, MB, CF.

Seasonal activity: IV–VIII.



Bolitophila (Bolitophila) saundersii (Curtis, 1836)

(Map 3)

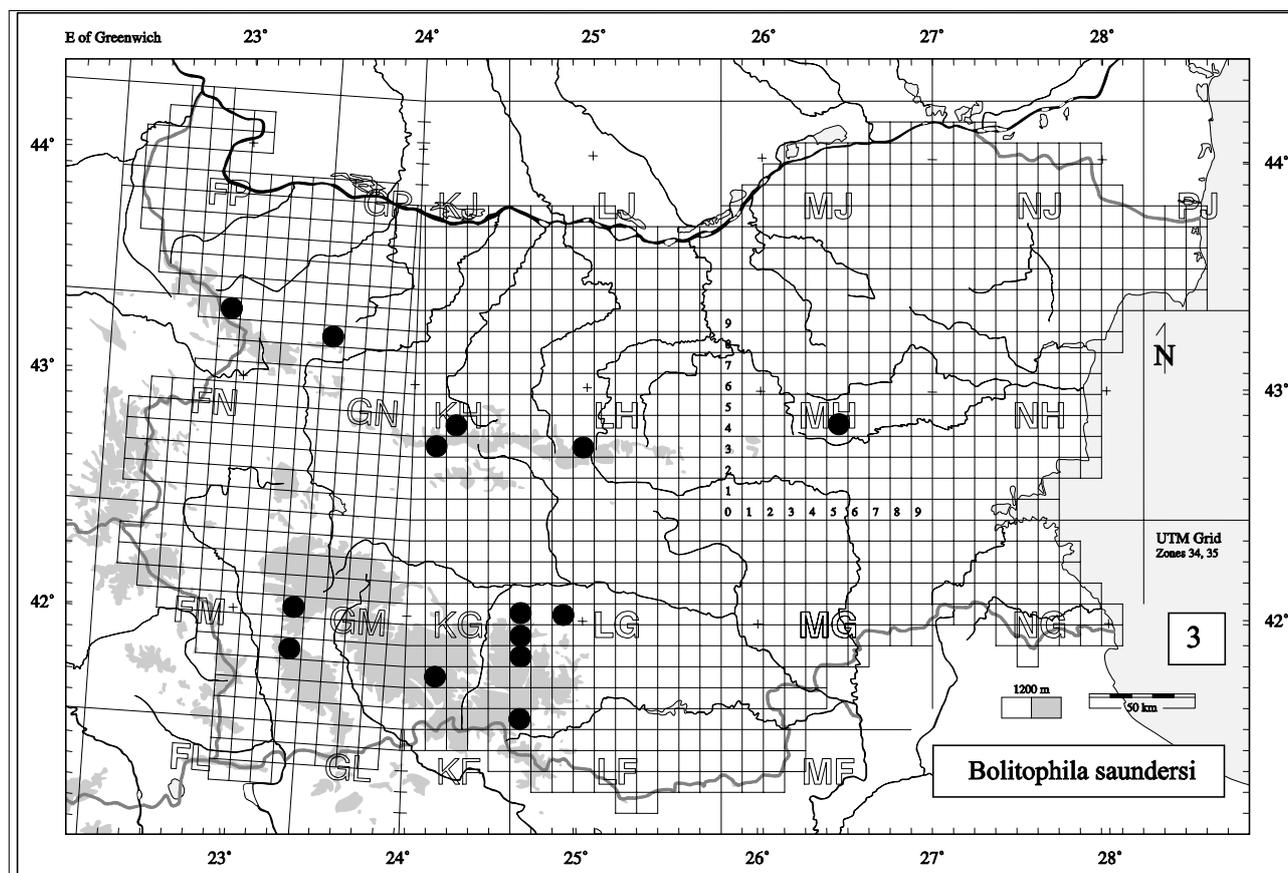
Messala saundersi: Burghele-Balacesco, 1966: 305 (1); *Bolitophila saundersi* (Curtis): Bechev, 1985a: 36 (2); 1997: 10; 2000: 56; 2002a: 82; 2004b: 132 (3); 2006b: 701(4).

Localities: SBW: FN59: Dalgi del, 24.07.1983, 1♂ (3); GN08: Zgorigrad, 4.07.1983, 2♂ (3); Parshevitsa, 17.07.1983, 2♂ (3). SBM: KH63: Zlatitsa, 20.07.1983, 1♂, 1♀ (3); Zlatishki prohod, 18.07.1983, 1♂ (3); KH74: Boatin, 6.06.1982, 1♂ (3); LH33: Ray, 27.08.1997, 2♂ (3). SBE: MH54: Kotel, 14.08.1962, 2♀ (1, 2). RPR: FM95: Parangalitsa, 28.08.1989, 1♂ (3).

RPP: FM93: Yavorov, 26.07.1985, 1♂ (3). RRW: KG62: Shiroka polyana, 8.08.2000, 1♂ (4); LG00: Smolyan, 26.05.1996, 1♂ (4); LG03: Chudnite mostove, 8.09.1990, 1♂ (4); LG04: Sitovo, 1.06.1981, 1♂ (4); LG05: Akademik, 17.11.1990, 1♂ (4); Bryanovshtitsa, 17.11.1990, 1♂ (4); Dedevo, 27.05.2000, 1♂ (4); LG25: Asenovgrad, 25.11.1990, 1♂ (4).

Vertical distribution: 400–1800 m; XO, MOH, MB, CF.

Seasonal activity: V–XI.



Bolitophila (Bolitophila) tenella Winnertz, 1863

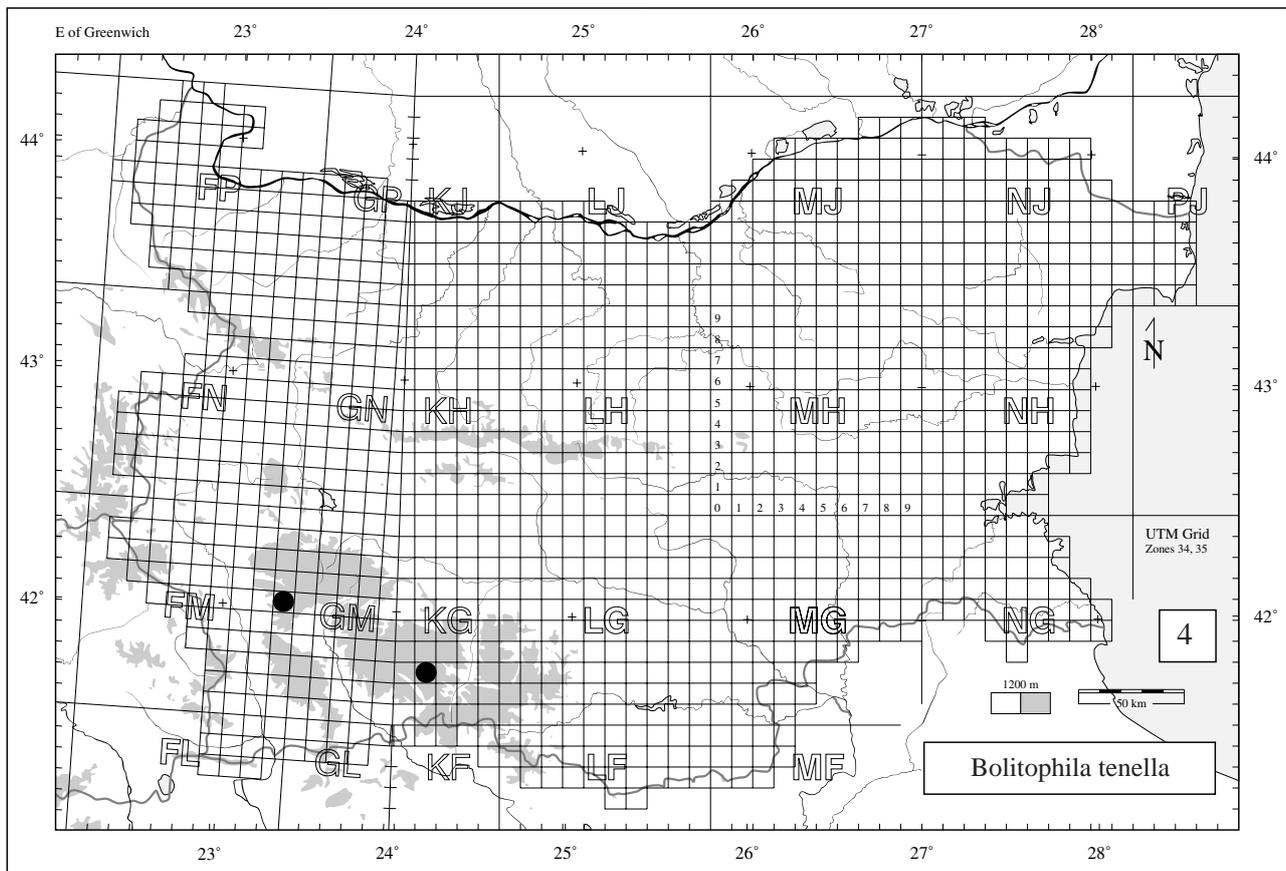
(Map 4)

Bechev, 2001: 5 (1); 2002a: 82; 2006b: 702 (2)

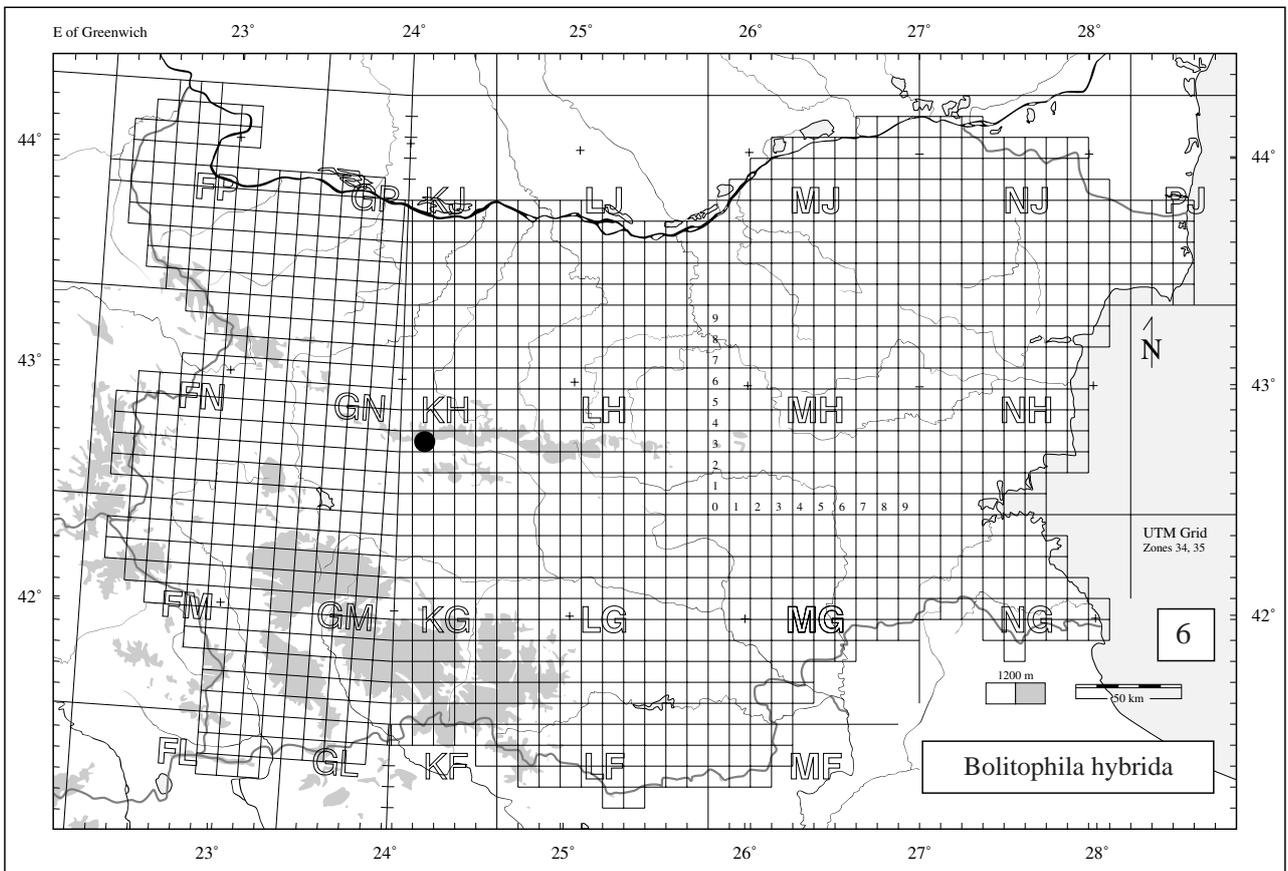
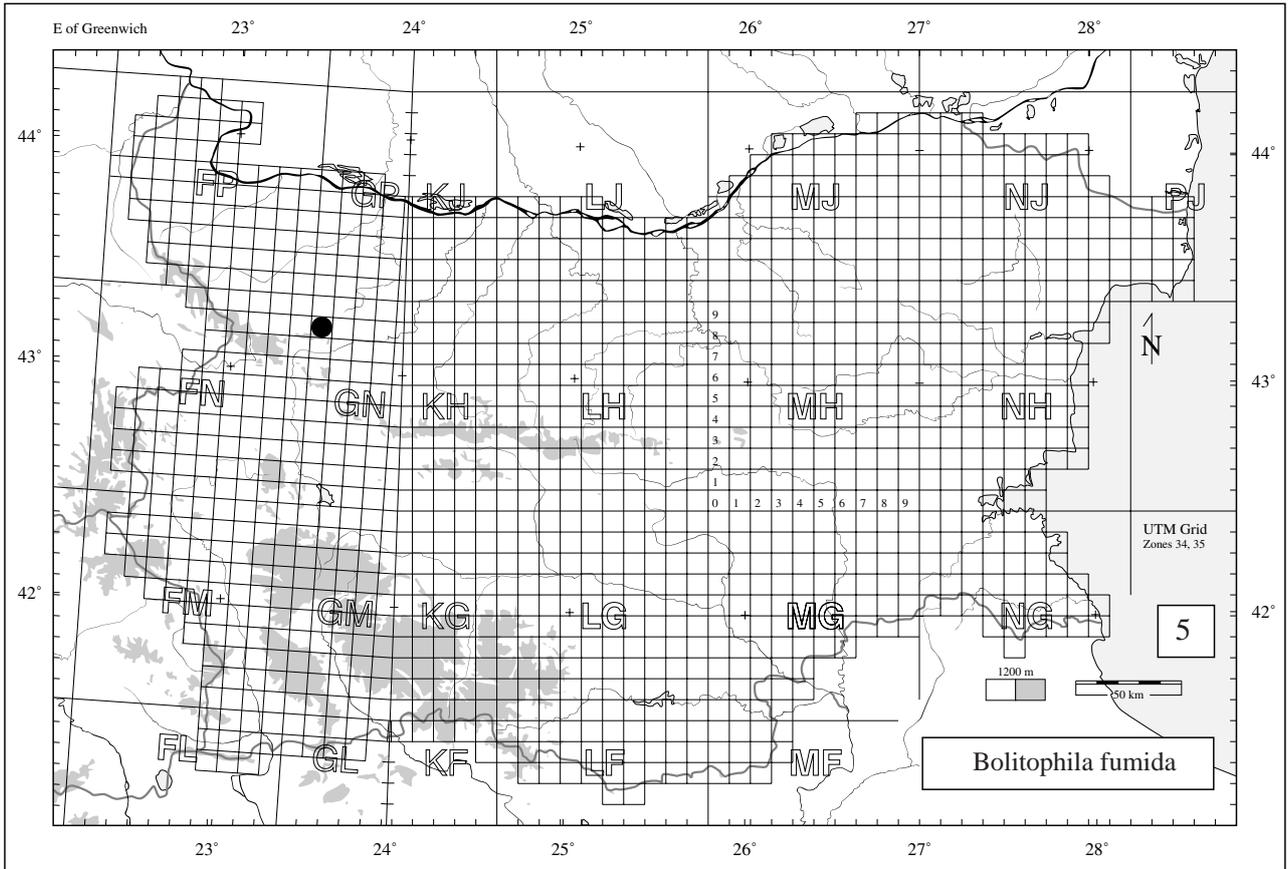
Localities: RPR: FM95: Parangalitsa, 28.08.1989, 1♂ (1). RRW: KG62: Shiroka polyana, 8.08.2000, 1♂ (1, 2).

Vertical distribution: 1500–1700 m; CF.

Seasonal activity: VIII.



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Subgenus *Cliopisa* Enderlein, 1836

Bolitophila (Cliopisa) fumida Edwards, 1941

(Map 5)

B. glabrata Loew: Bechev, 1989a: 154 (1); 1997: 10; 2000: 56. *B. fumida* Edwards: Bechev, 2001: 5 (2); 2002a: 82.

Localities: SBW: GN08: Parshevitsa, 17.07.1983, 1♂ (1, 2).

Vertical distribution: 1300 m; MB.

Seasonal activity: VII.

Bolitophila (Cliopisa) hybrida (Meigen, 1804)

(Map 6)

B. fusca Meigen: Nedelkov, 1912: 179 (1). *B. hybrida* (Meigen): Bechev, 1985a: 36 (2); 1997: 10; 2000: 56; 2002a: 82; 2004b: 132 (3).

Localities: SBM: KH63: Zlatishki prohod, 18.07.1983, 1♂ (3). RPR: Rila Mt (1, 2).

Vertical distribution: 900 m; MB.

Seasonal activity: VII.

Bolitophila (Cliopisa) maculipennis Walker, 1836

(Map 7)

Bechev, 1989a: 154 (1); 1997: 10; 2000: 56; 2002a: 82.

Localities: SBM: KH74: Divchovoto, 25.04.1983, 2♂ (1); Boatin, 20.04.1983, 1♂ (1).

Vertical distribution: 700–1000 m; MB.

Seasonal activity: IV.

Bolitophila (Cliopisa) occlusa Edwards, 1913

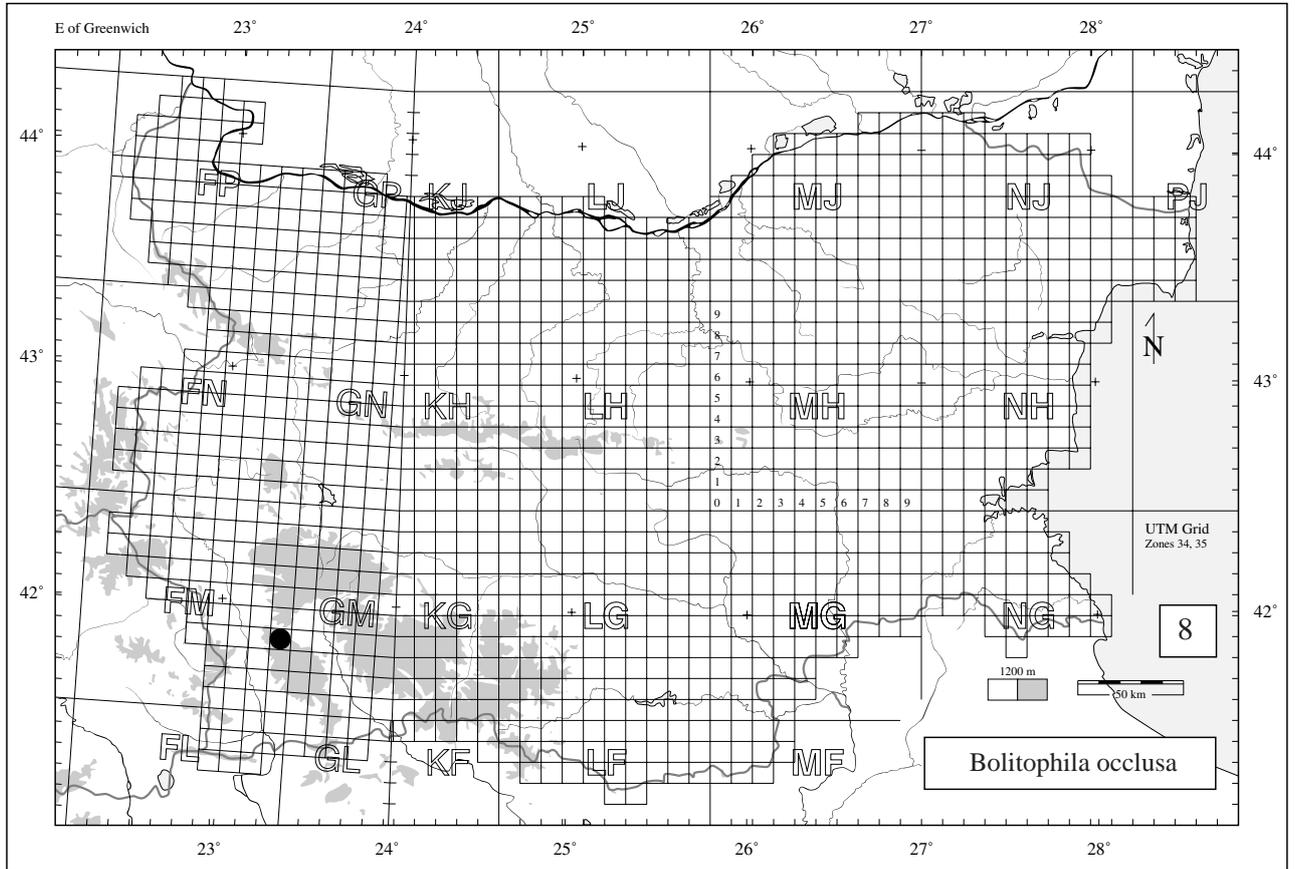
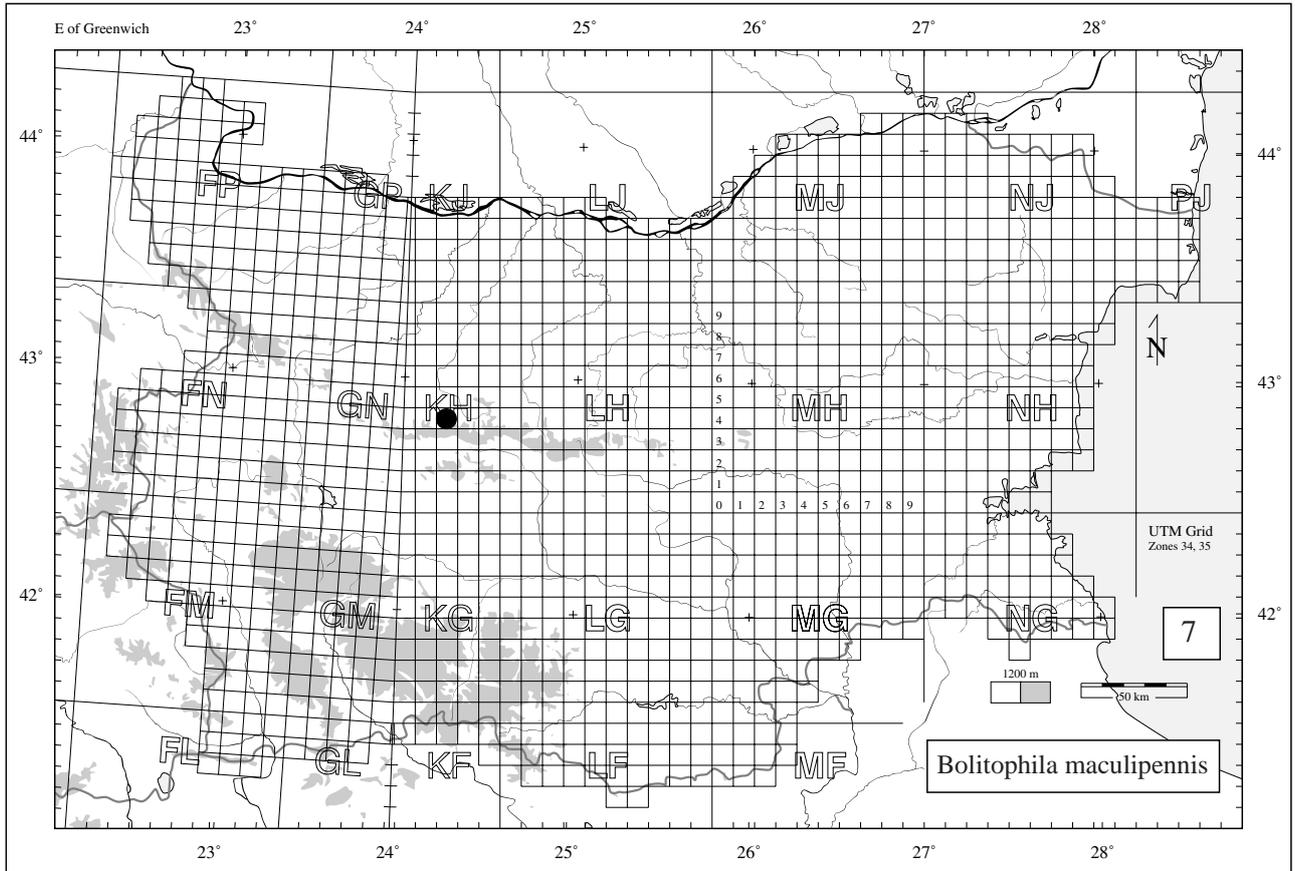
(Map 8)

Bechev, 1991a: 27 (1); 1997: 10; 2002a: 82.

Localities: RPP: FM93: Yavorov, 20.07.1985, 1♂ (1).

Vertical distribution: 1740 m; CF.

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

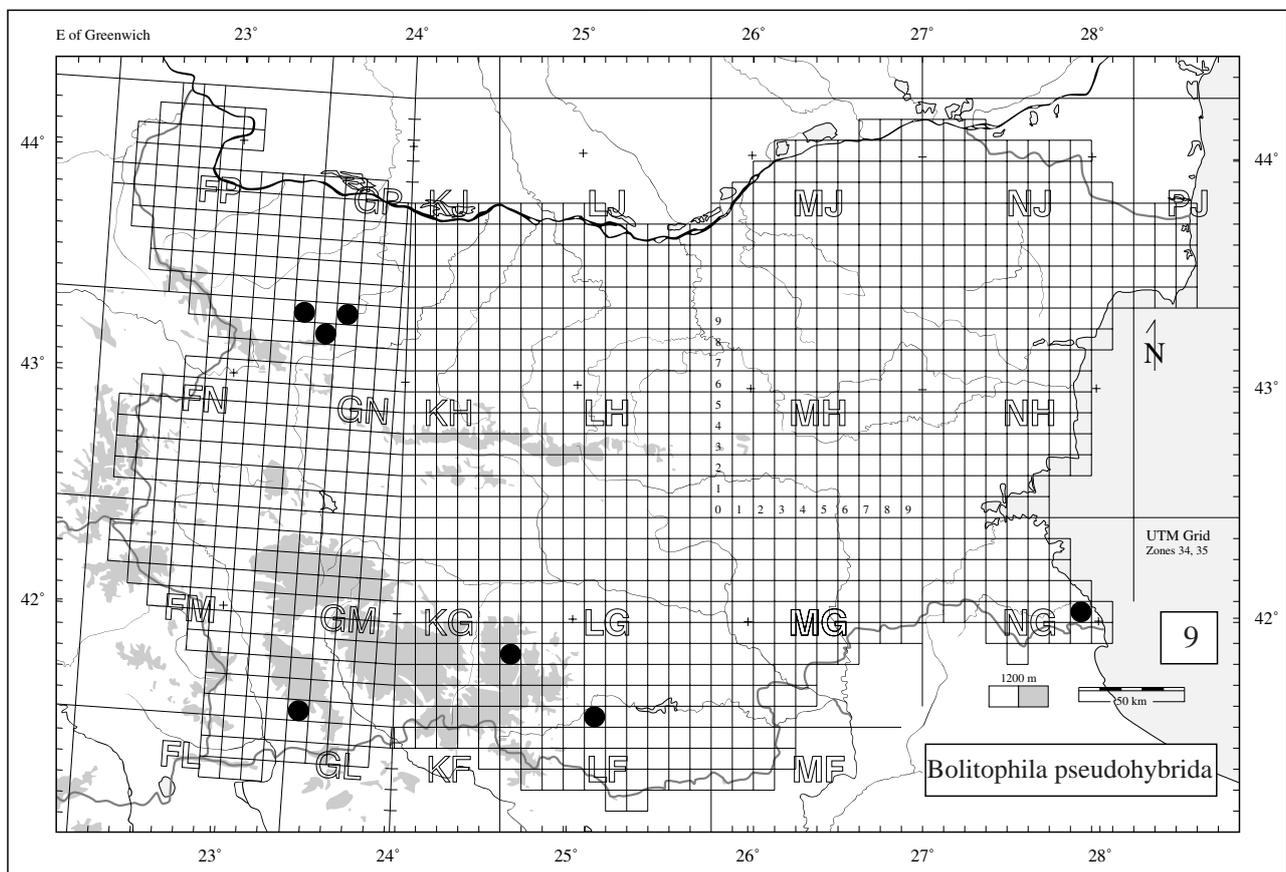
(Map 9)

Bechev 1989a: 154 (1); 1997: 10; 2000: 56; 2002a: 82; 2004a: 735 (2); 2004b: 132 (3); 2006b: 702 (4).

Localities: SPW: GN19: Veslets, 9.04.1989, 2♂ (3). SBW: FN99: Matnitsa, 7.11.1983, 2♂ (1); GN08: Vratsa, 26.6.1988, 1♂ (3). ROP: GM00: Rozhenski manastir, 28.05.1993, 1♂ (3). RRW: LG03: Chudnite mostove, 8.10.1990, 1♂ (4). RRE: LG40: Ardino, 16.05.1991, 1♂ (2). BS: NG75: Sinemorets, 2.06.1990, 1♂ (3).

Vertical distribution: 20–1450 m; XO, MB.

Seasonal activity: IV–VI, X, XI.



Bolitophila (Cliopisa) rossica Landrock, 1912

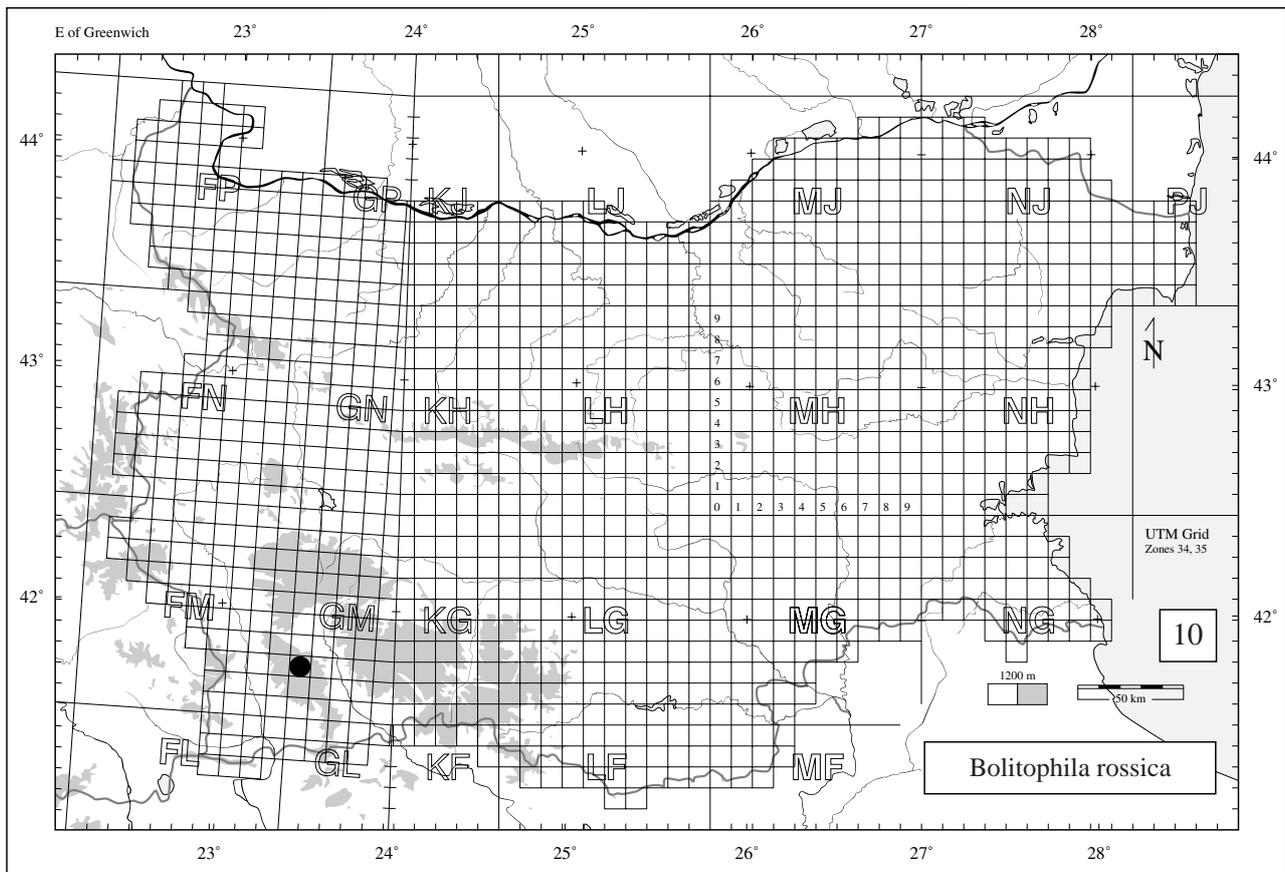
(Map 10)

Bechev, 2001: 7 (1); 2002a: 82.

Localities: RPP: GM02: Demyanitsa, 18.08.2001, 2♂ (1).

Vertical distribution: 2000 m; CF.

Seasonal activity: VIII.



Family DIADOCIDIIDAE

Genus *Diadocidia* Ruthe, 1831

Subgenus *Adidocidia* Laštovka et Matile 1972.

***Diadocidia (Adidocidia) valida* Mik, 1874**

(Map 11)

Bechev, 1986a: 72 (1); 1997: 10; 2000: 56; 2002a: 83; 2006b: 702 (2).

Localities: SBW: FN88: Byalata voda, 26.06.1982, 2♂ (1). RRW: KG53: Golyam Beglik, 31.07.1988, 1♀ (2).

Vertical distribution: 770–1600 m; MB, CF.

Seasonal activity: VI, VII.

Subgenus *Diadocidia* s. str.

***Diadocidia (Diadocidia) ferruginosa* (Meigen.1830)**

(Map 12)

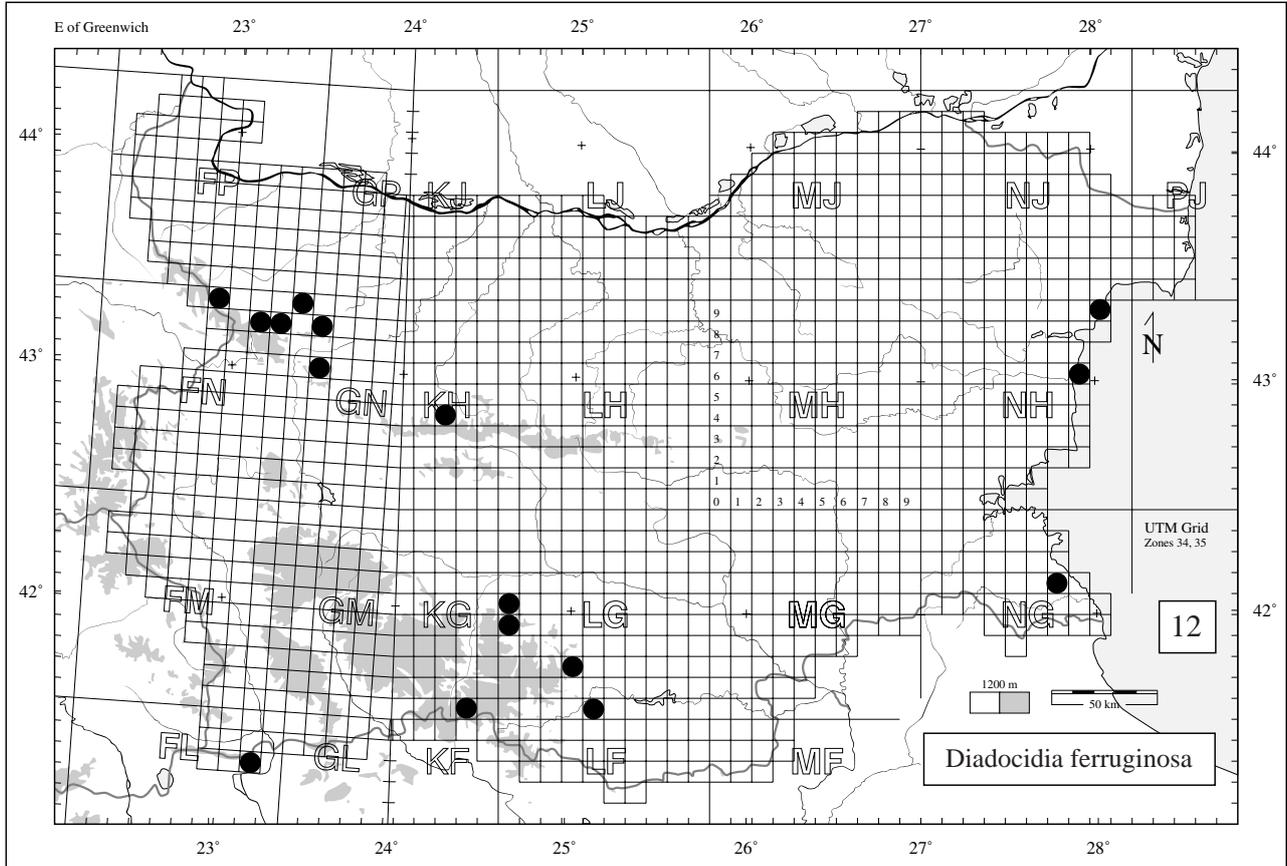
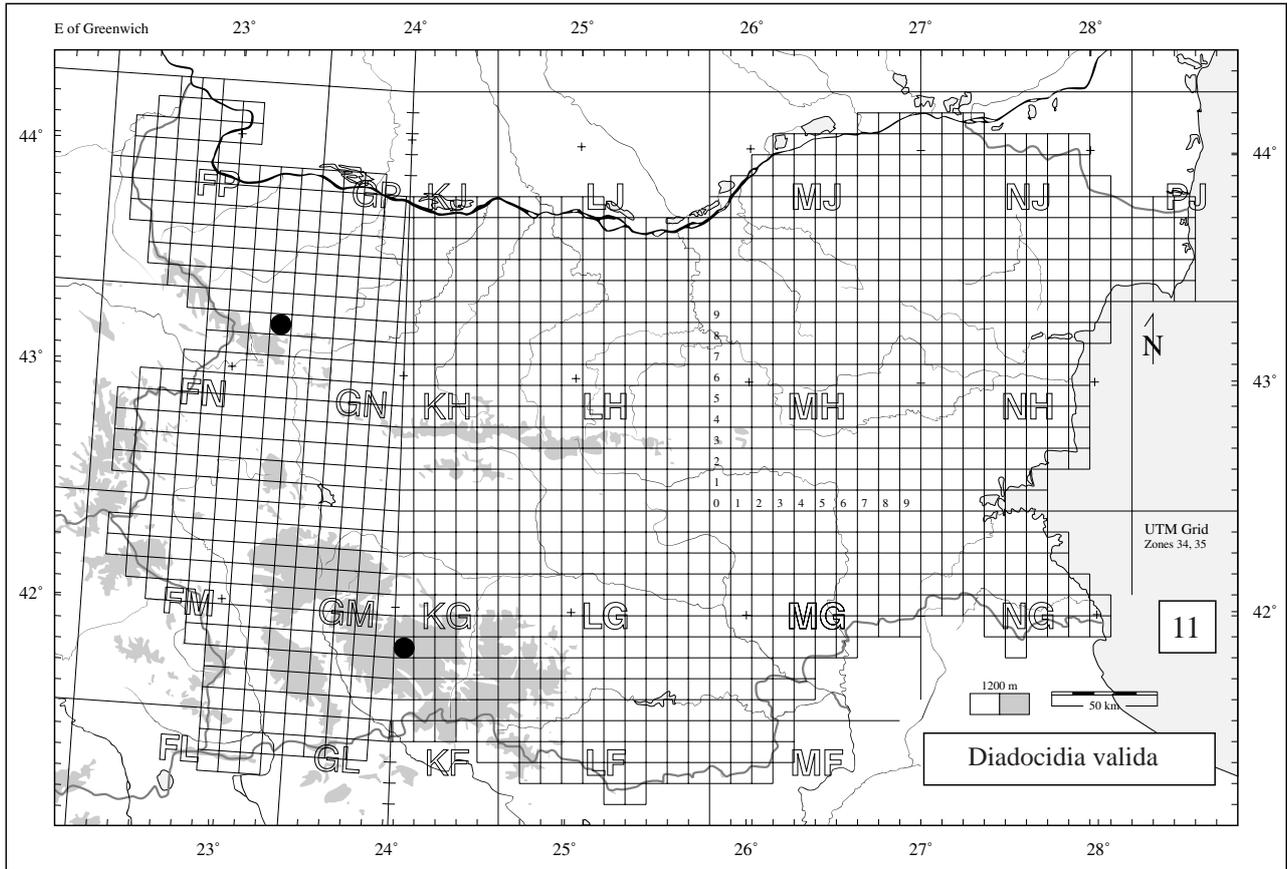
Bechev, 1986a: 72 (1); 1997: 10; 2000: 56; 2002a: 83; 2004a: 735 (2); 2004b: 132 (3); 2006b: 702 (4).

Localities: SBW: FN59: Dalgi del, 24.07.1984, 1♂ (3); FN78: Berkovitsa (above of), 23.05.1982, 1♂ (1); 8.07.1982, 1♂ (1); FN88: Byalata voda, 26.06.1982, 3♂ (1); FN99: Matnitsa, 4.09.1984, 1♂ (3); GN06: Osenovlag, 5.09.1984, 1♂ (3); GN08: Zgorigrad, 4.07.1983, 1♂ (3); Parshevitsa, 17.07.1983, 1♂ (3); Ledenika, 8.06.1984, 1♂ (3). SBM: KH74: Boatina, 6.06.1982, 1♂ (3); 7.09.1984, 1♂ (3). ROB: FL87: Belasitsa, 23.06.1992, 1♂ (3). RRW: KG80: Trigrad, 1.08.1988, 1♂ (4); LG04: Lilkovo, 27.08.1990, 1♂ (4); LG05: Hrabrino, 1.09.1989, 1♂ (4); LG32: Zagrazhden, 8.06.1990, 1♂ (4); Kormisosh, 11.07.1991, 1♂ (4). RRE: LG40: Ardino, 16.05.1991, 1♂ (2). BN: NH76: Kamchia, 4.07.1985, 1♂ (3); 17.06.1991, 1♂ (3); NH89: Aladzha manastir, 15.05.1996, 1♂ (3). BS: NG66: Tsarevo, 11.06.1990, 1♂ (3).

Vertical distribution: 5–1350 m; XO, MB, CF.

Seasonal activity: V–IX.

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Diadocidia (Diadocidia) spinosula Tolle, 1948

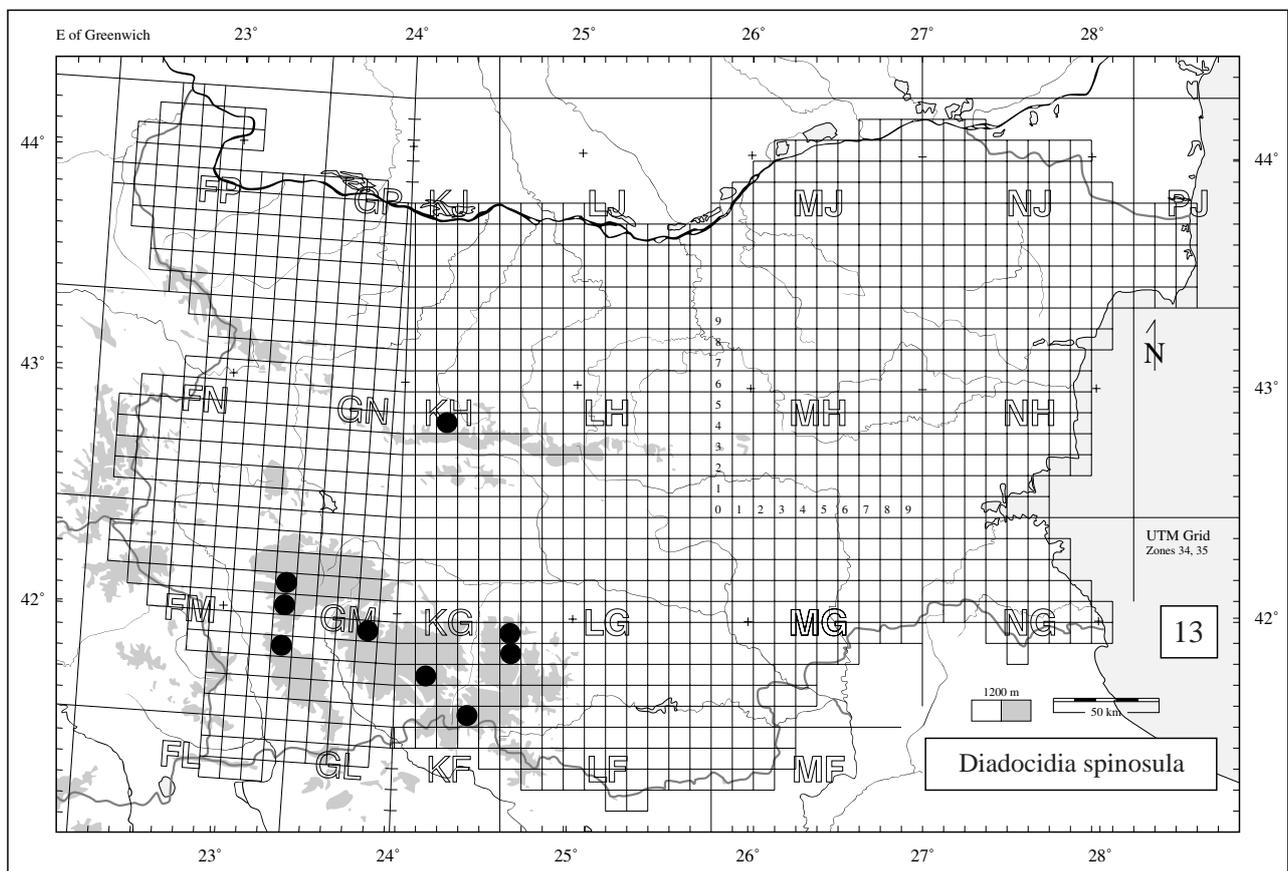
(Map 13)

Bechev, 1989a: 154 (1); 1997: 10; 2000: 56; 2002a: 83; 2004b: 132 (2); 2006b: 702 (3).

Localities: SBM: KH74: Boatin, 6.06.1982, 1♂ (1). RPR: FM95: Parangalitsa, 28.08.1989, 3♂, 4♀ (2); FM96: Rilski manastir, 27.08.1989, 2♂ (2). RPP: FM93: Yavorov, 20.07.1985, 1♂ (2). RRW: GM34: Krastava, 13.08.1991, 1♂ (3); KG62: Shiroka polyana, 8.08.2000, 1♂ (3); KG80: Trigrad, 1.08.1988, 1♂ (3); LG03: Chudnite mostove, 8.09.1990, 1♂ (3); LG04: Lilkovo, 1.09.1989, 2♂ (3); Zdravets, 10.06.2000, 1♂ (3).

Vertical distribution: 900–1740 m; MB, CF.

Seasonal activity: VI–IX



Family DITOMYIIDAE

Genus *Ditomyia* Winnertz, 1846

Ditomyia fasciata (Meigen, 1818)

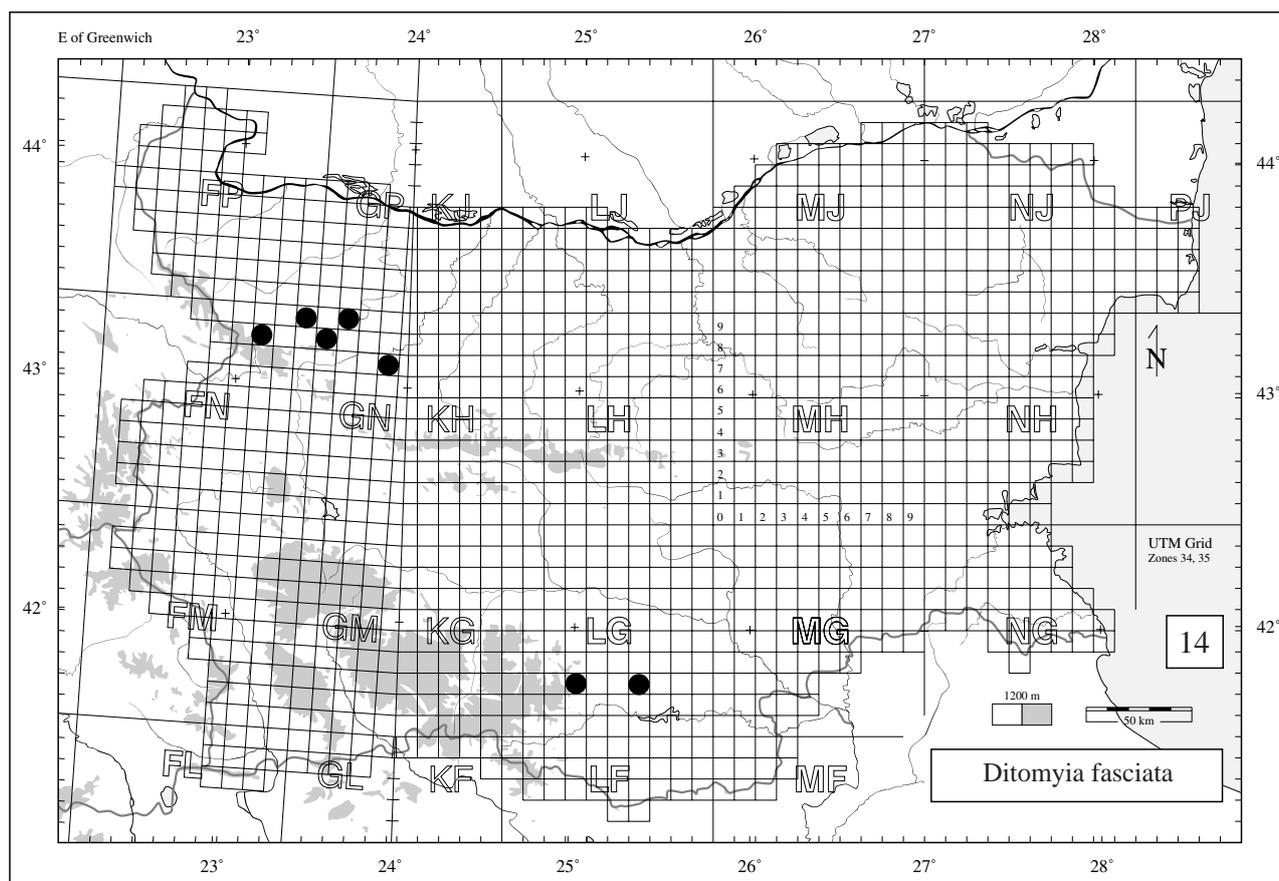
(Map 14)

Bechev, 1985a: 36 (1); 1989b: 161; 1997: 10; 2000: 57; 2002a: 83; 2004a: 735 (2); 2004b: 132 (3); 2006b: 702 (4).

Localities: SPW: GN19: Veslets, 9.04.1989, 1♂ (3); GN37: Karash, 9.07.1988, 1♂, 1♀ (3). SBW: FN78: Berkovitsa (above of), 20.08.1982, 1♂, 1♀ (1); FN99: Matnitsa, 20.08.1982, 1♂ (1); 4.09.1984, 1♀ (3); GN08: Vratsa, 29.04.1981, 2♂, 2♀ (1); Parshevitsa, 21.05.1981, 1♂ (1); 23.09.1984, 1♂ (3). RRW: LG32: Zagrazhden, 8.06.1990, 1♂ (4); Kormisosh, 11.07.1991, 1♂ (4). RRE: LG62: Chernoochene, 14.05.1991, 1♂ (2).

Vertical distribution: 200–1200 m; XO, MB.

Seasonal activity: IV–IX.



Genus *Symmerus* Walker, 1848

Symmerus annulatus (Meigen, 1830)

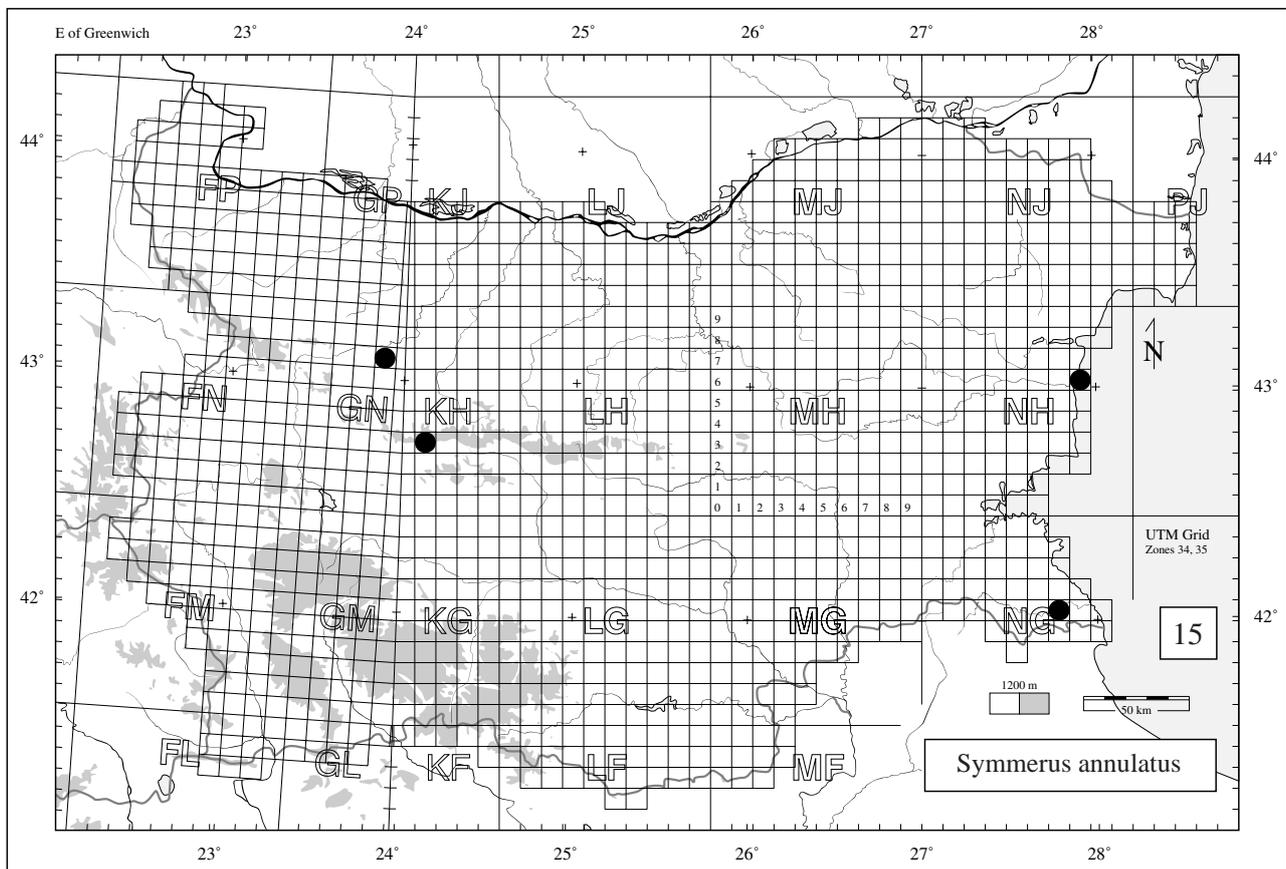
(Map 15)

Bechev, 1986b: 56 (1); 1997: 10; 2000: 57; 2002a: 83; 2004b: 133 (2).

Localities: SPW: GN37: Karash, 9.07.1988, 1♂ (2). SBM: KH63: Zlatishki prohod, 18.07.1983, 1♂ (1). PBS: NG65: Kosti, 27.05.1987, 1♂ (2); 28.05.1987, 1♂ (2). BN: NH76: Kamchia, 4.07.1985, 1♂ (2); Shkorpilovtsi, , 21.05.1990, 1♂ (2).

Vertical distribution: 10–900 m; XO, MOH.

Seasonal activity: V, VII.



Family KEROPLATIDAE
Subfamily KEROPLATINAE
Tribe Keroplatini
 Genus *Cerotelion* Rondani, 1856

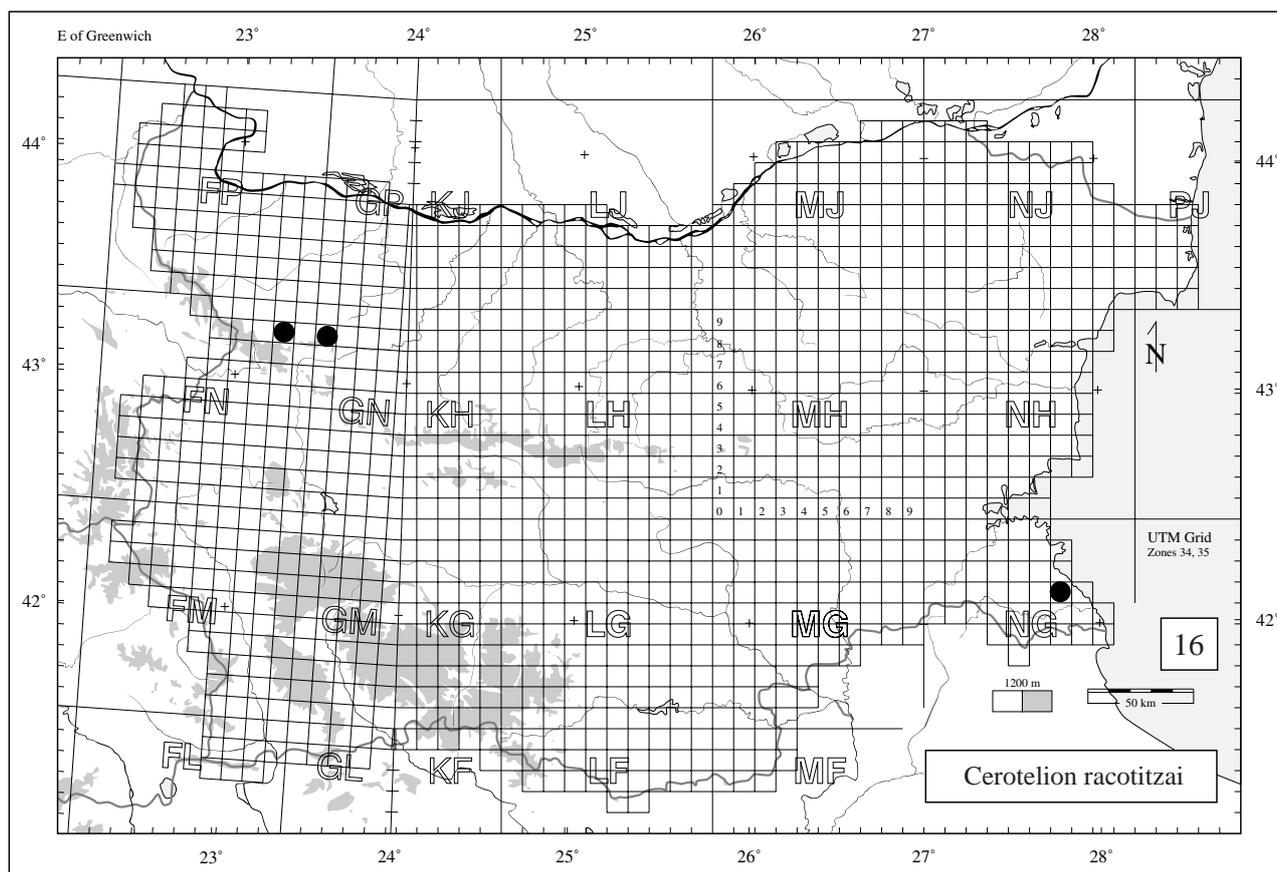
Cerotelion racovitzai Matile et Burghele-Balacesco, 1969
 (Map 16)

Bechev, 1986b: 57 (1); 1997: 10; 2000: 57; 2002a: 83; 2004b: 133 (2).

Localities: SBW: FN88: Byalata voda, 30.05.1985, 2♂ (2); GN08: Zgorigrad (above of), 12.08.1982, 1♂ (1). BS: NG66: Tsarevo, 11.06.1991, 1♂ (2).

Vertical distribution: 50–1250 m; XO, MOH, MB.

Seasonal activity: V, VI, VIII.



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

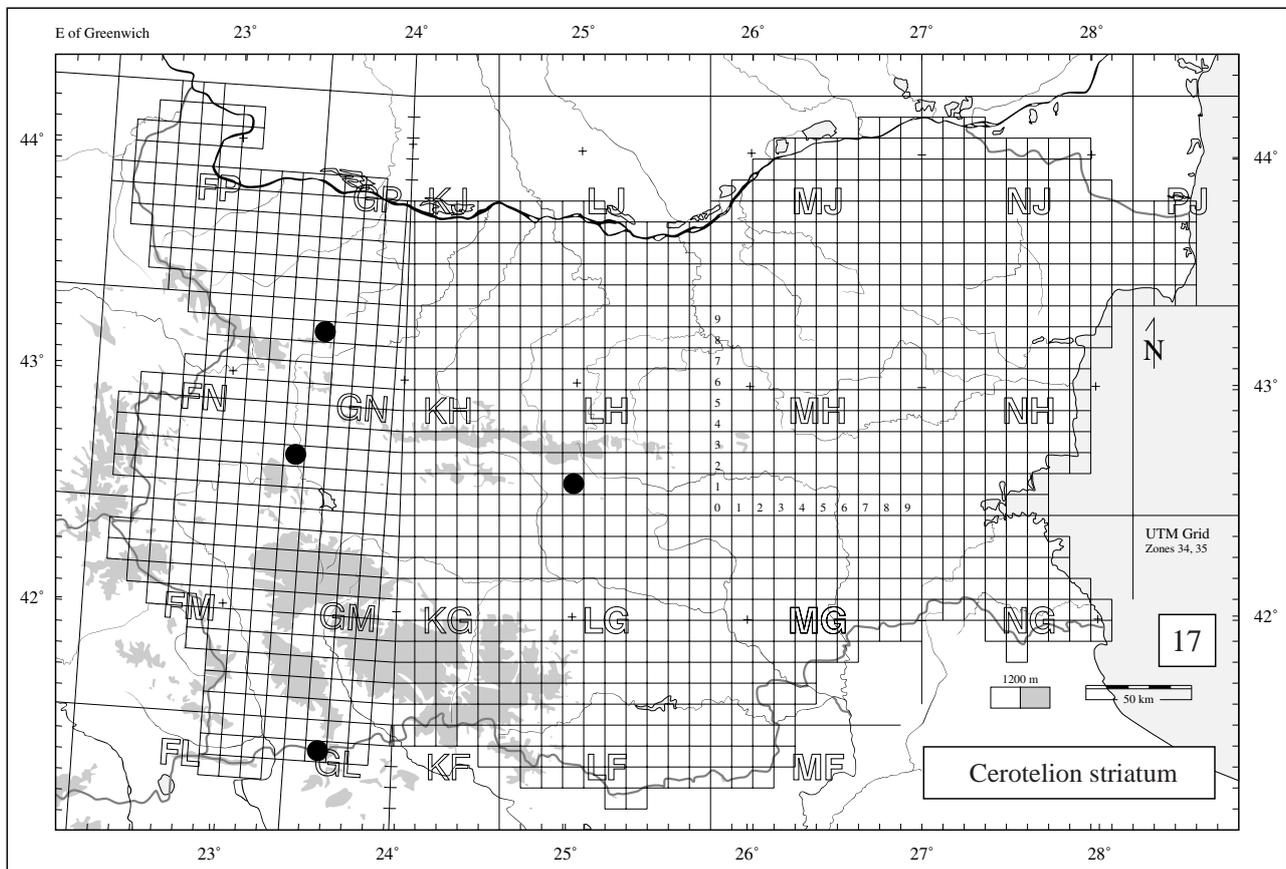
(Map 17)

Ceroplatus lineatus Fabricius: Nedelkov, 1912: 179 (1). *Cerotelion lineatus* (Fabricius): Bechev, 1985a: 37 (2); 1997: 10; 2000: 57. *C. striatum* (Gmelin): Bechev, 2002a: 83; 2004b: 133 (3).

Localities: SBW: GN08: Vratsa, 22.07.1982, 1♂ (3); 20.05.1986, 1♂ (3); 14.07.1983, 1♂ (3). SBM: LH31: Kalofer, 27.08.1997, 1♂ (3). PVS: FN92: Sofia (1, 2). RPS: GL18: Goleshovo, 5.06.1988, 2♂ (3).

Vertical distribution: 350–800 m; XO, MOH, MB.

Seasonal activity: V–VIII, X.



Genus *Keroplatus* Bosc, 1792

Keroplatus reaumurii Dufour, 1839

(Map 18)

Bechev, 2001: 7 (1); 2002a: 84; 2004b: 133 (2).

Localities: SBW: GN08: Vratsa, 1.07.1982, 1♂ (2); 07.1982 (2), 1♂; 14.07.1983, 1♂ (2); 12.06.1986, 1♂ (2); 15.06.1986, 2♂ (2); 3.08.1991, 1♂ (1); 25.08.1991, 2♂ (2).

BN: NH76: Kamchia, 4.07.1985, 1♂, 1♀ (2); Shkorpilovtsi, 8.06.1990, 1♂ (2).

Vertical distribution: 20–400 m; XO.

Seasonal activity: VI–VIII.

Keroplatus testaceus Dalman, 1818

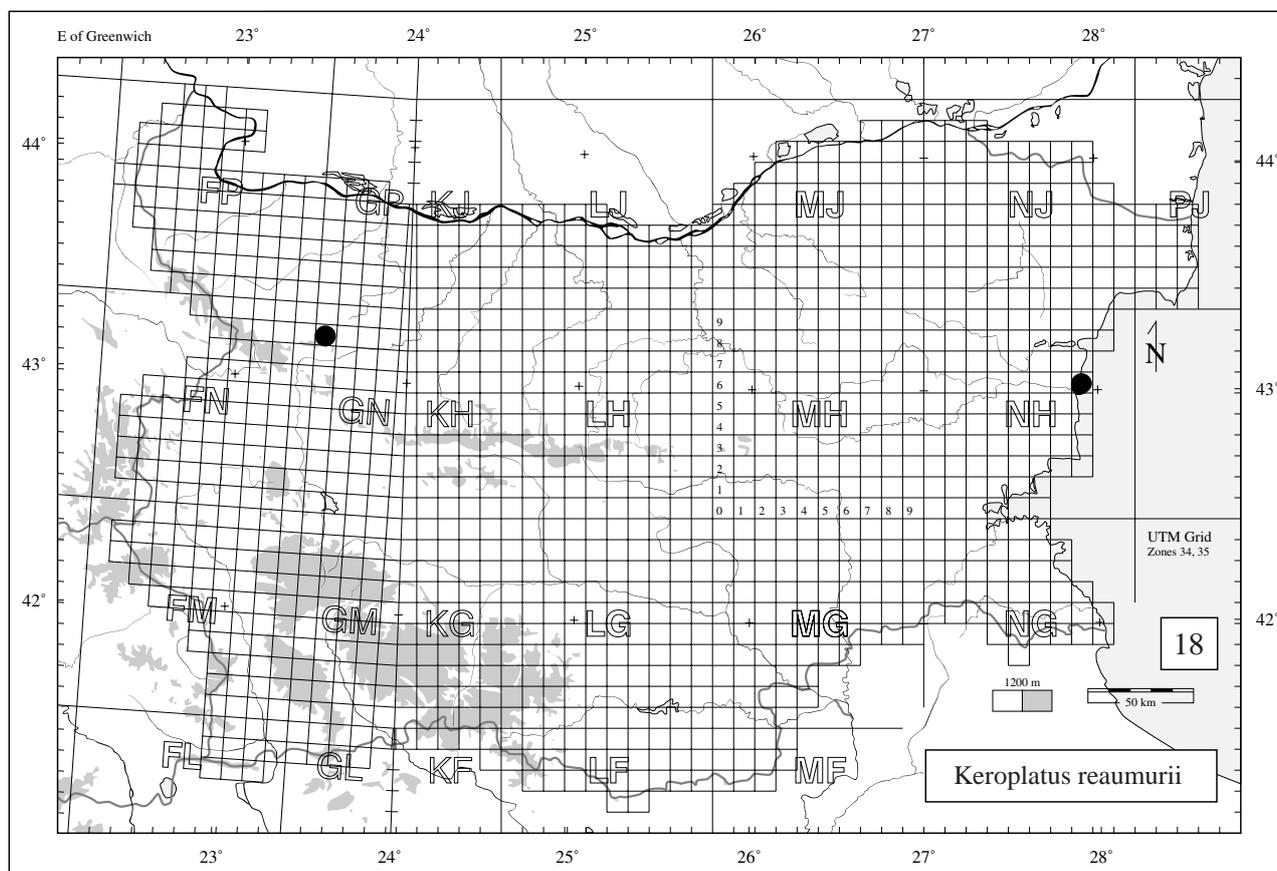
(Map 19)

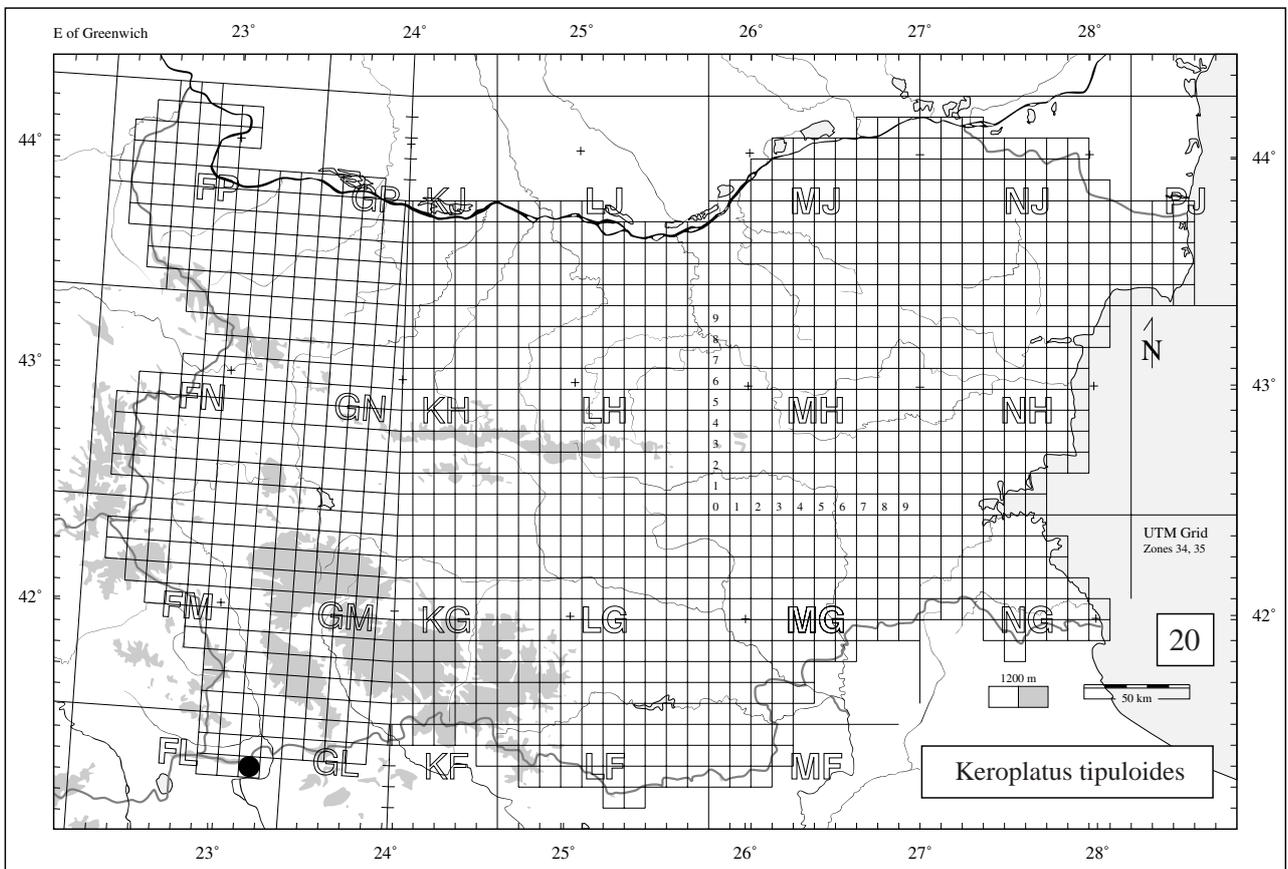
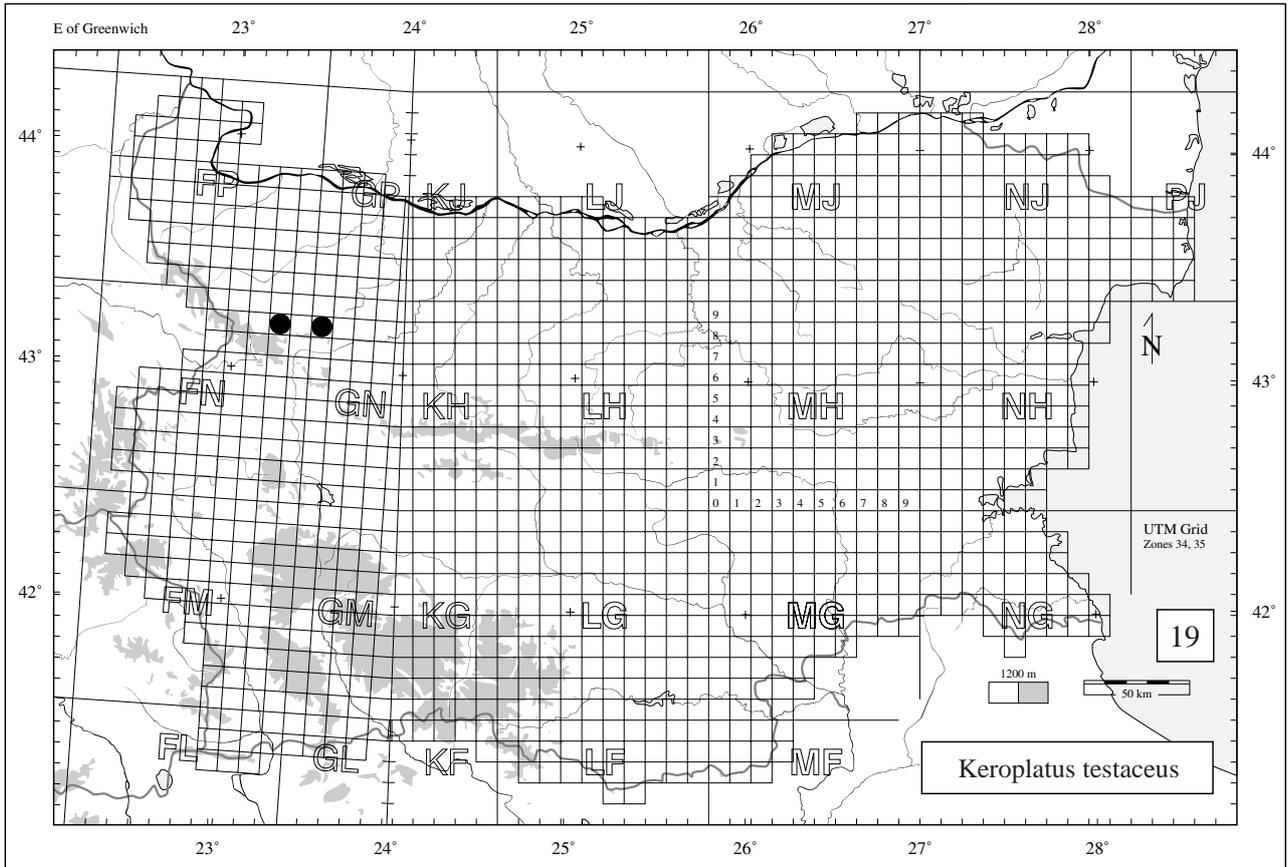
Bechev, 1986b: 57 (1); 1997: 10; 2000: 57; 2002a: 84.

Localities: SBW: FN88: Byalata voda, 10.07.1982, 1♂ (1); GN08: Vratsa, 12-14.07.1982, 2♂, 1♀ (1).

Vertical distribution: 350–775 m; XO, MB.

Seasonal activity: VII.





Keroplatus tipuloides Bosc, 1792

(Map 20)

Bechev, 1999a: 38; 2002a: 84; 2004b: 133 (1).

Localities: ROB: FL87: Belasitsa, 24.06.1992, 2♂ (1).

Vertical distribution: 700 m; MB.

Seasonal activity: VI.

Tribe **Orfeliini**

Genus *Antlemon* Haliday in Loew, 1871

Subgenus *Antlemonopsis* Tollett, 1953

Antlemon (Antlemonopsis) brevimanum (Loew, 1871)

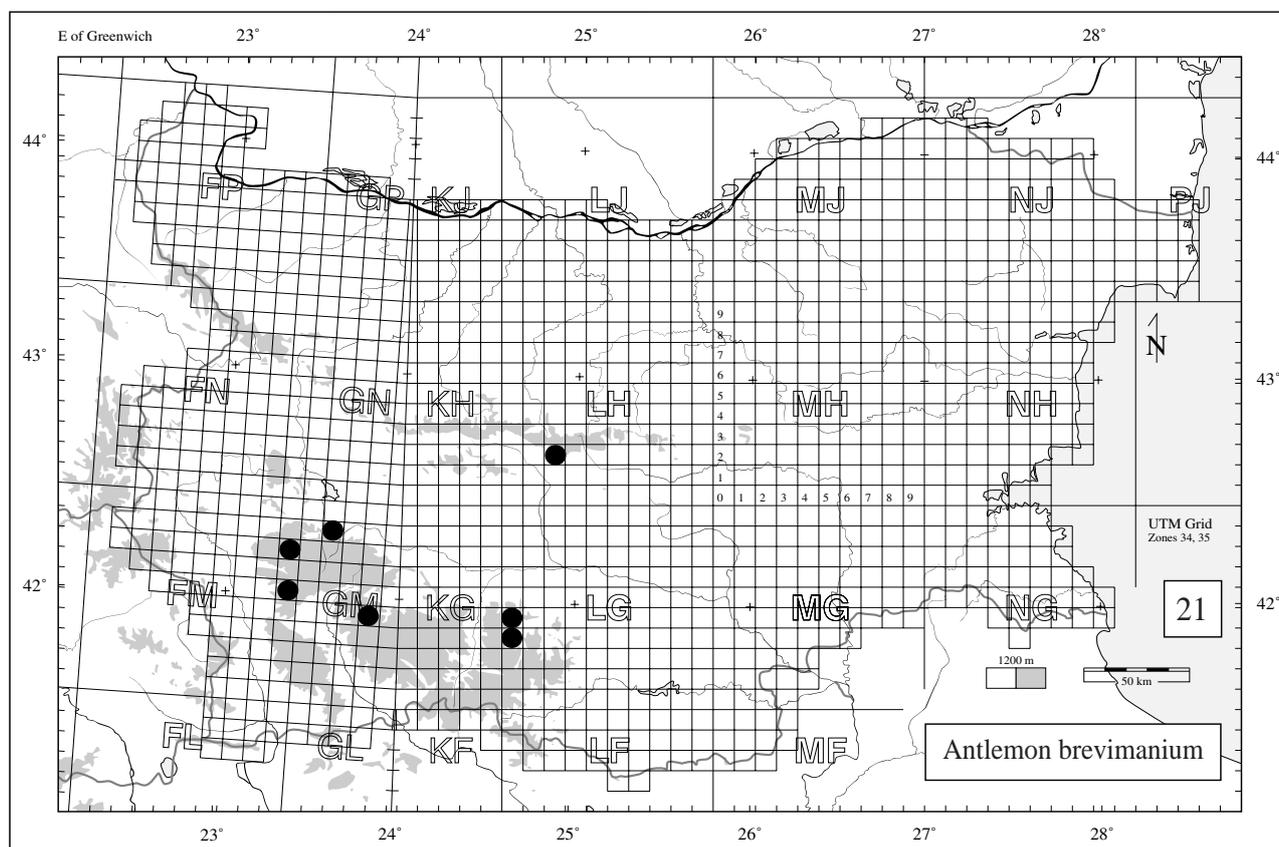
(Map 21)

Bechev, 1991a: 27 (1); 1997: 10; 2000: 57; 2002a: 84; 2004b: 133 (2); 2006b: 702 (3).

Localities: SBM: LH22: Levski, 28.08.1997, 1♂ (2). RPR: FM95: Parangalitsa, 28.08.1989, 1♂ (2); FM97: Kirilova polyana, 27.08.1989, 1♂ (1); GM18: Borovets, 17.08.1990, 1♂ (2). RRW: GM34: Krastava, 27.08.1991, 1♂ (3); 16.09.1991, 1♂ (3); LG03: Persenk, 11.08.1996, 1♂ (3); Chudnite mostove, 12.08.1996, 3♂ (3); LG04: Lilkovo, 27.08.1990, 1♂ (3); Sitovo, 27.08.1990, 2♂ (3).

Vertical distribution: 1300–1900 m; MB, CF.

Seasonal activity: VIII, IX.



Genus *Isoneuromyia* Brunetti, 1912

Isoneuromyia semirufa (Meigen, 1818)

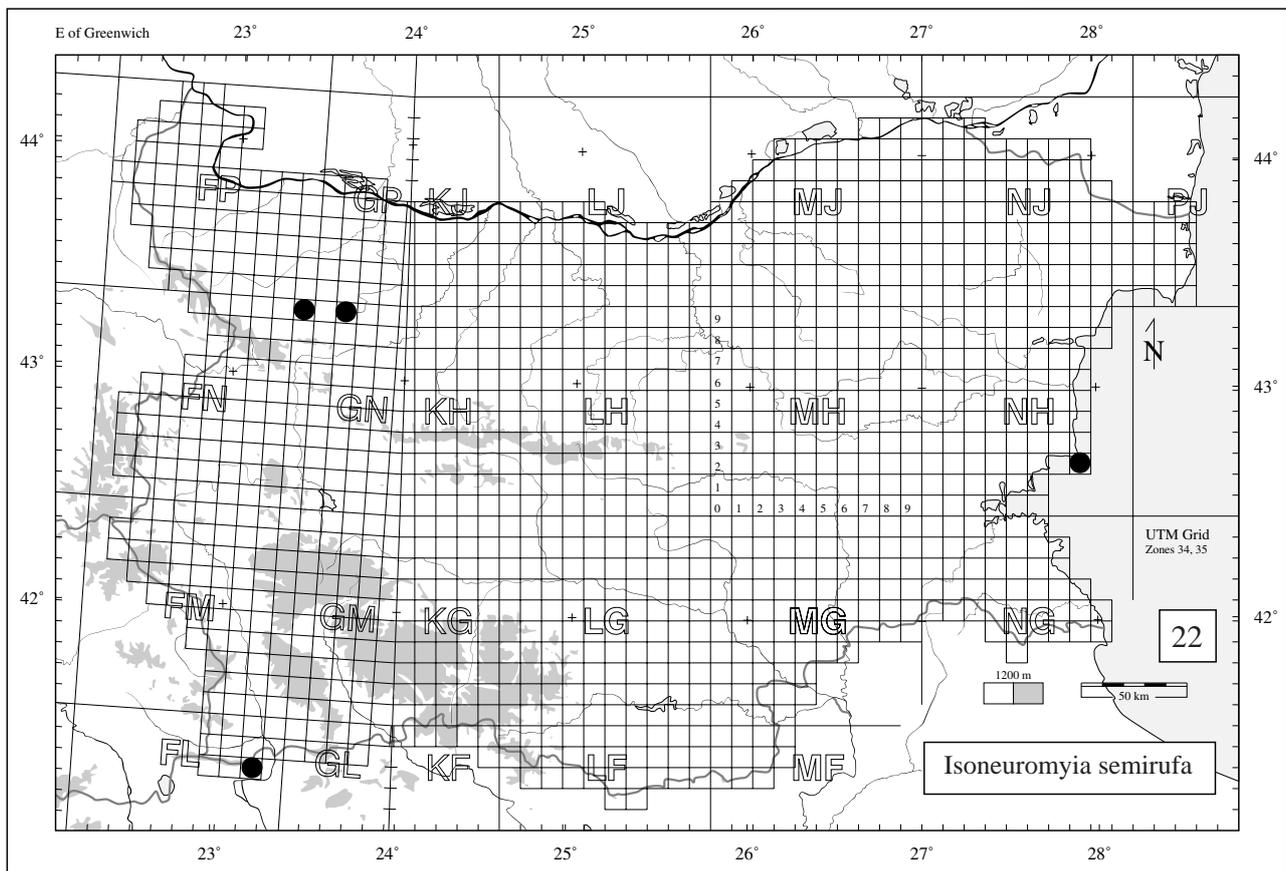
(Map 22)

Orfelia (*Isoneuromyia*) *semirufa*: Bechev, 1985a: 37 (1). *Isoneuromyia semirufa* (Meigen): Bechev, 1997: 10; 2000: 57; 2002a: 84; 2004b: 133 (2).

Localities: SPW: GN19: Veslets, 20.07.1982, 1♂ (1). SBW: FN99: Matnitsa, 10.07.1982, 2♂ (1). ROB: FL87: Belasitsa, 26.06.1992, 4♂ (2). BN: NH72: Emona, 5.08.1993, 1♂ (2).

Vertical distribution: 100–720 m; XO, MB.

Seasonal activity: VI–VIII.



Genus *Macrorrhyncha* Winnertz, 1846

Macrorrhyncha collarti (Tollet, 1955)

(Map 23)

Asindulum exemplum Plassmann: Plassmann, 1978: 205 (1) ; Bechev, 1985a: 37 (2).

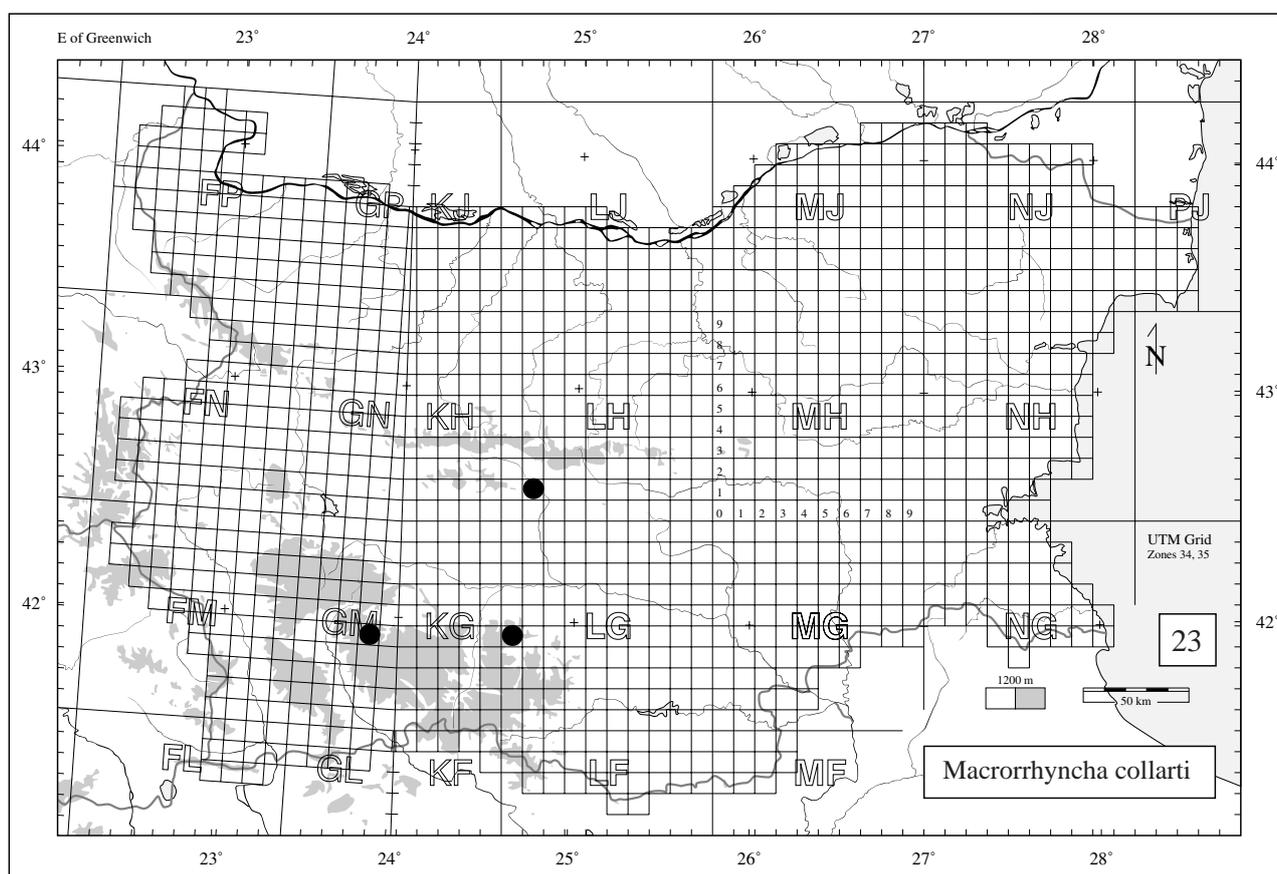
Macrorrhyncha exempla Plassmann: Bechev, 1992a: 318 (3). *M. collarti* (Tollet):

Bechev, 1997: 11; 2000: 57; 2002a: 84; 2006b: 702 (4).

Localities: SBM: LH11: Sopot (1, 2, 3). RRW: GM34: Krastava, 31.08.1992, 1♂ (4);
LG04: Lilkovo, 27.08.1990, 2♂ (3, 4).

Vertical distribution: 800 m 1500 m; MB, CF.

Seasonal activity: VIII, X.



Macrorrhyncha flava Winnertz, 1846

(Map 24)

Bechev, 1985a: 37 (1); 1997: 11; 2000: 57; 2002a: 84; 2004b: 133 (2).

Localities: SBW: FN78: Berkovitsa (above of), 20.08.1982, 1♂ (1). BN: NH76: Kamchia, 4.07.1985, 1♀ (2); Tsarevo, 20.06.1989, 4♂, 3♀ (2). BS: NG68: Velika, 16.06.1989, 6♀ (2); Ropotamo, 24.06.1989, 1♀ (2); NG75: Sinemorets, 21.06.1989, 2♂ (2).

Vertical distribution: 10–700 m; XO, MB.

Seasonal activity: VI–VIII.

Macrorrhyncha veleka Bechev, 1992

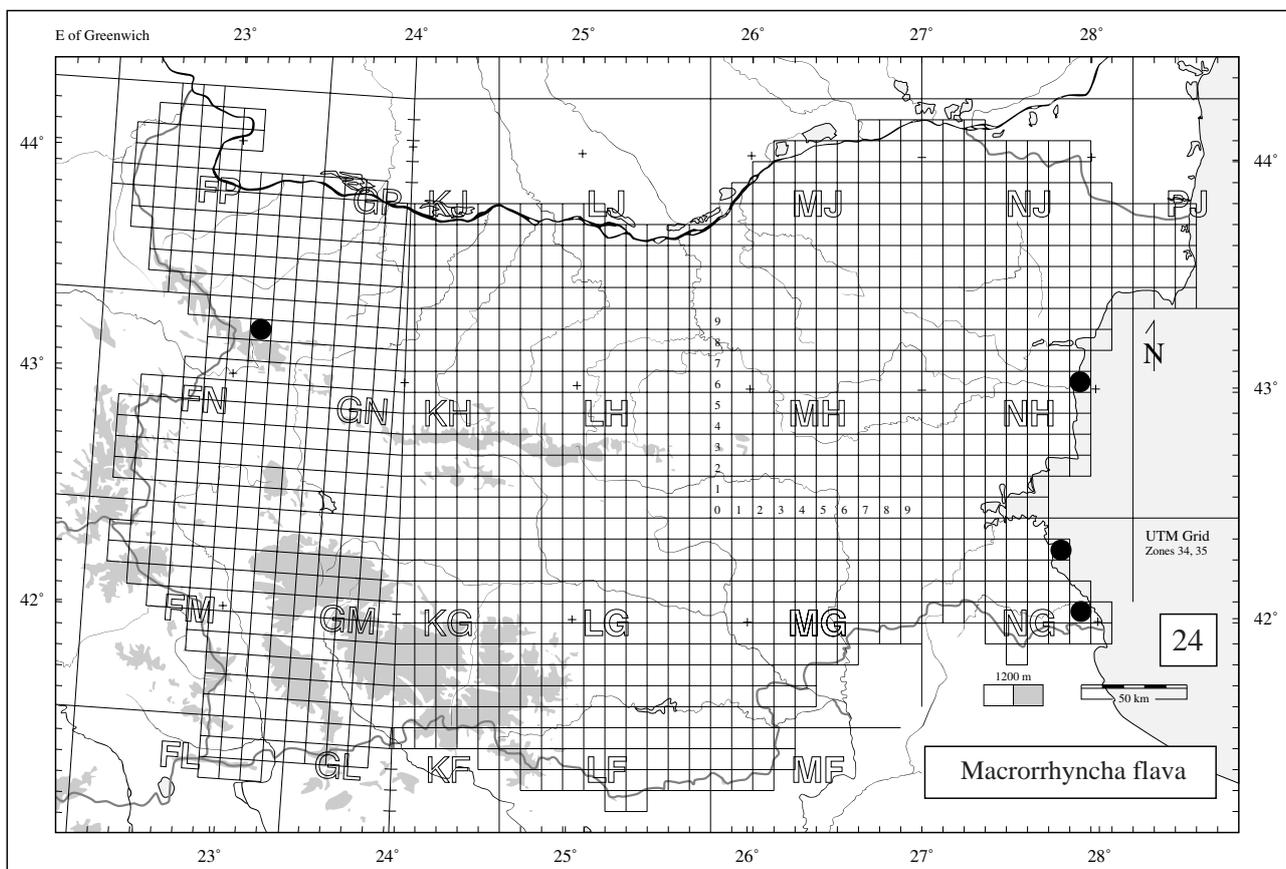
(Map 25)

Bechev, 1992b: 61 (1); 1997: 11; 2002a: 84.

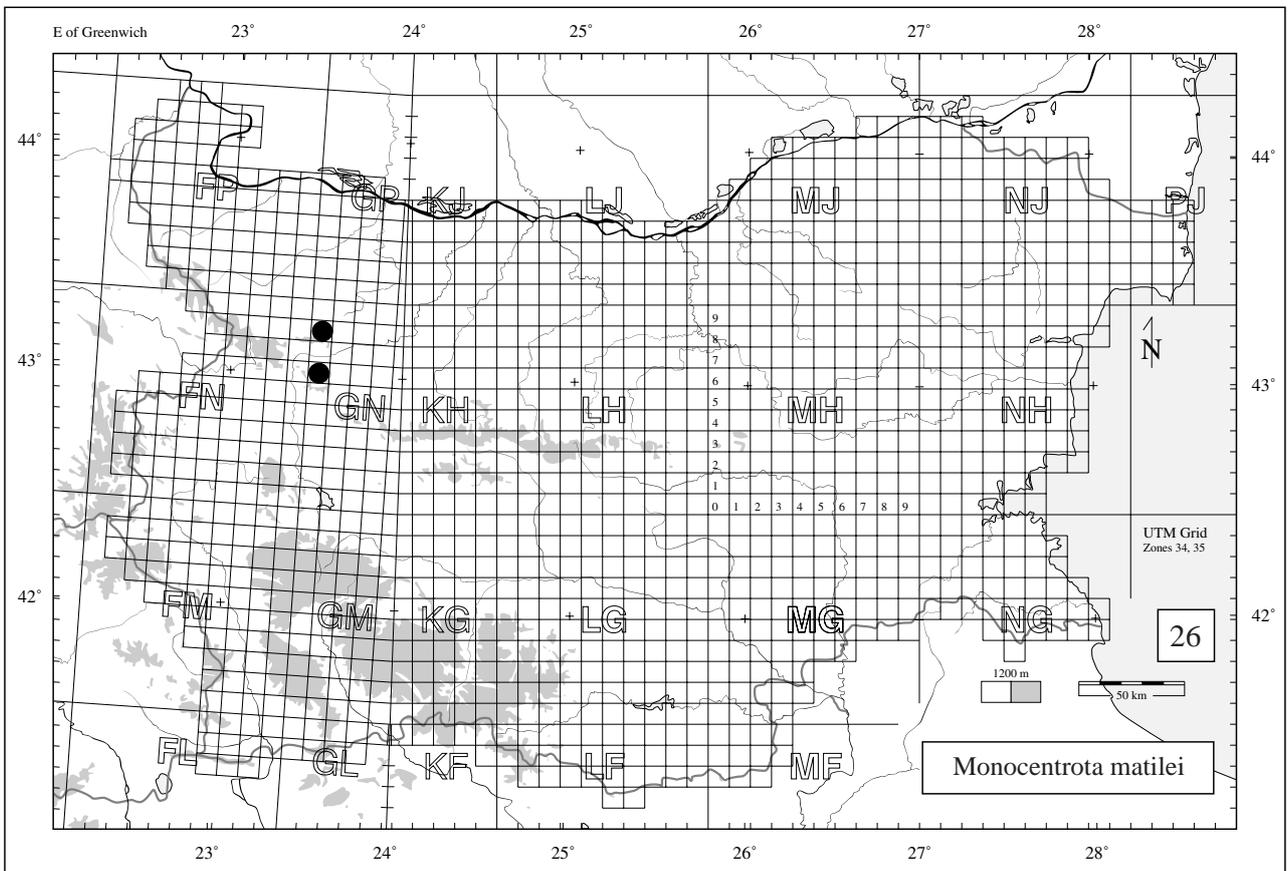
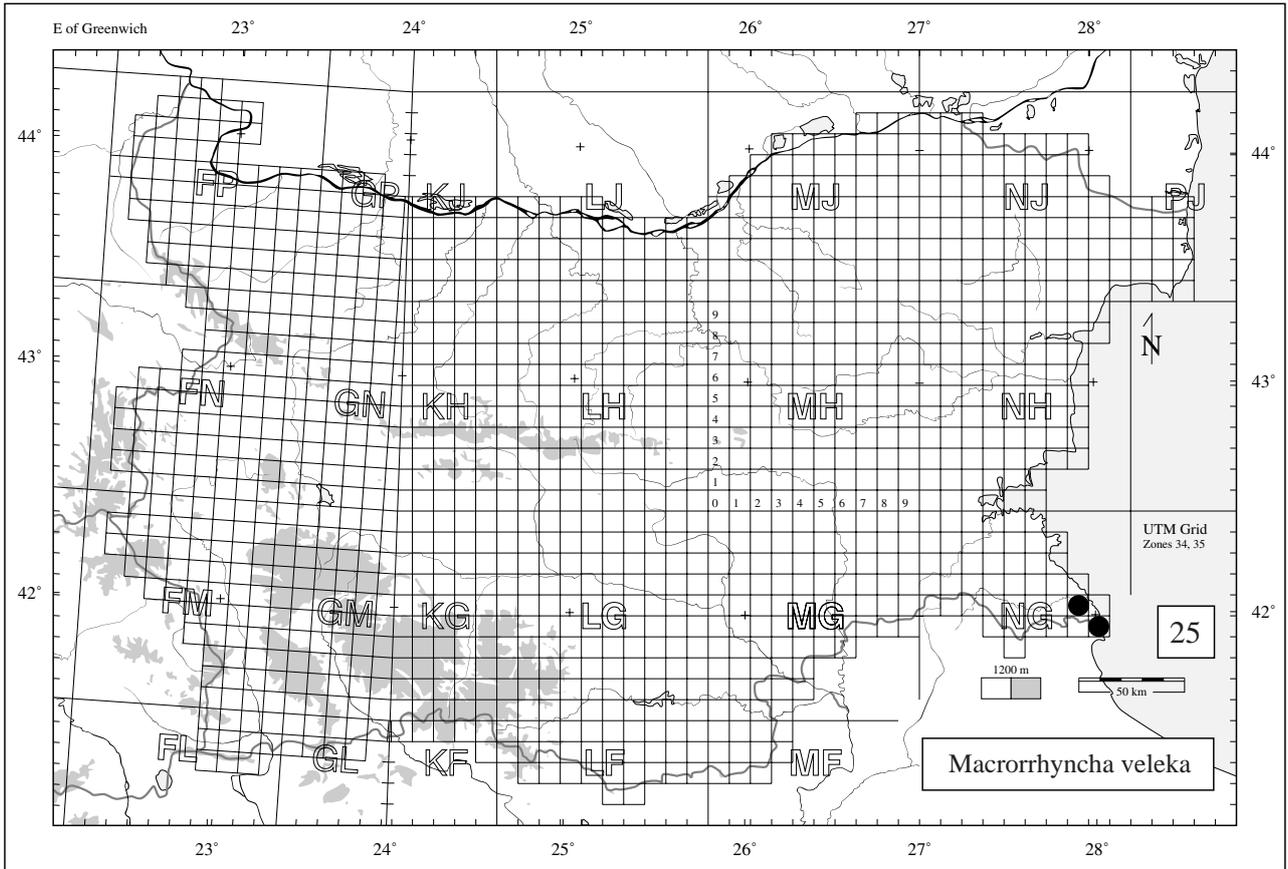
Localities: BS: NG75: Sinemorets, 21.06.1989, 1♂ (1).

Vertical distribution: 20 m; XO.

Seasonal activity: VI.



THE FUNGUS GNATS OF THE FAMILIES...



Genus *Monocentrot*a Edwards, 1925

*Monocentrot*a *matilei* Bechev, 1989
(Map 26)

Bechev, 1989c: 174 (1); 1997: 11; 2000: 57; 2002a: 84.

Localities: SBW: GN06: Osenovlag, 6.08.1987, 1♂ (1); GN08: Vratza, 21.07.1987, 1♂; 10.07.1982, 1♂ (1).

Vertical distribution: 350–700 m; XO, MOH.

Seasonal activity: VII–VIII.

Genus *Neoplatyura* Malloch, 1928

Neoplatyura modesta (Winnertz, 1863)
(Map 27)

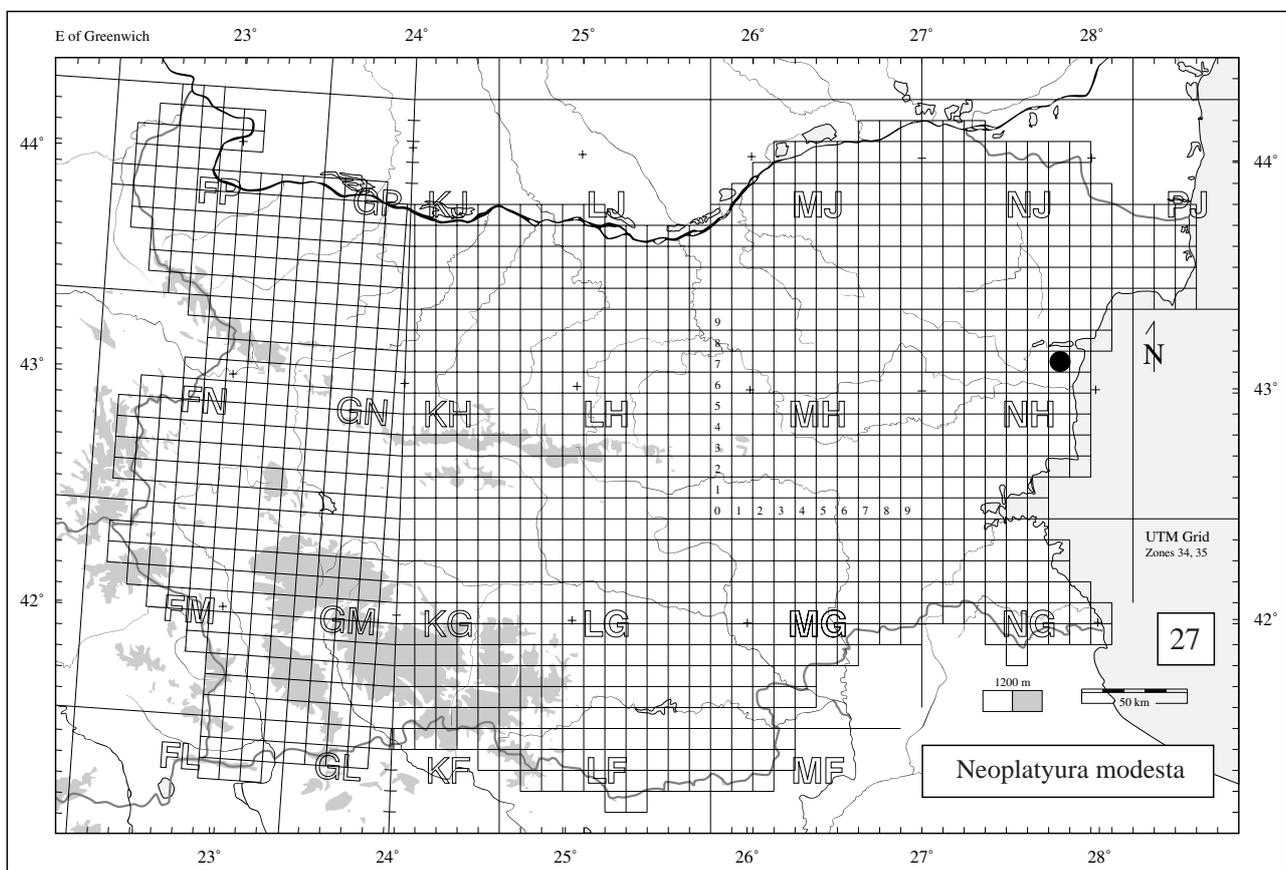
Bechev, 2001: 7 (1); 2002a: 85.

Localities: BN: NH76: Kamchia, 8.06.1990, 1♂ (1).

UTM: NH76.

Vertical distribution: 5 m; XO.

Seasonal activity: VI.



Neoplatyura nigricauda (Strobl, 1893)

(Map 28)

Orfelia (*N.*) *nigricauda*: Bechev, 1986b: 57 (1). *Neoplatyura nigricauda* (Strobl): Bechev, 1997: 11; 2000: 57; 2002a: 85; 2004b: 133 (2).

Localities: SPW: GN19: Veslets, 31.05.1985, 1 ♀ (2). SBW: FN99: Matnitsa, 27.06.1984, 1 ♂ (1). PBS: NG66: Silkosia, 11.06.1990, 1 ♂ (2). RRE: LF48: Zlatograd, 25.09.1993, 1 ♂.

Vertical distribution: 200–350 m; XO, MOH.

Seasonal activity: V, VI, IX.

Genus *Orfelia* A. Costa, 1857

Orfelia bezzii (Strobl, 1909)

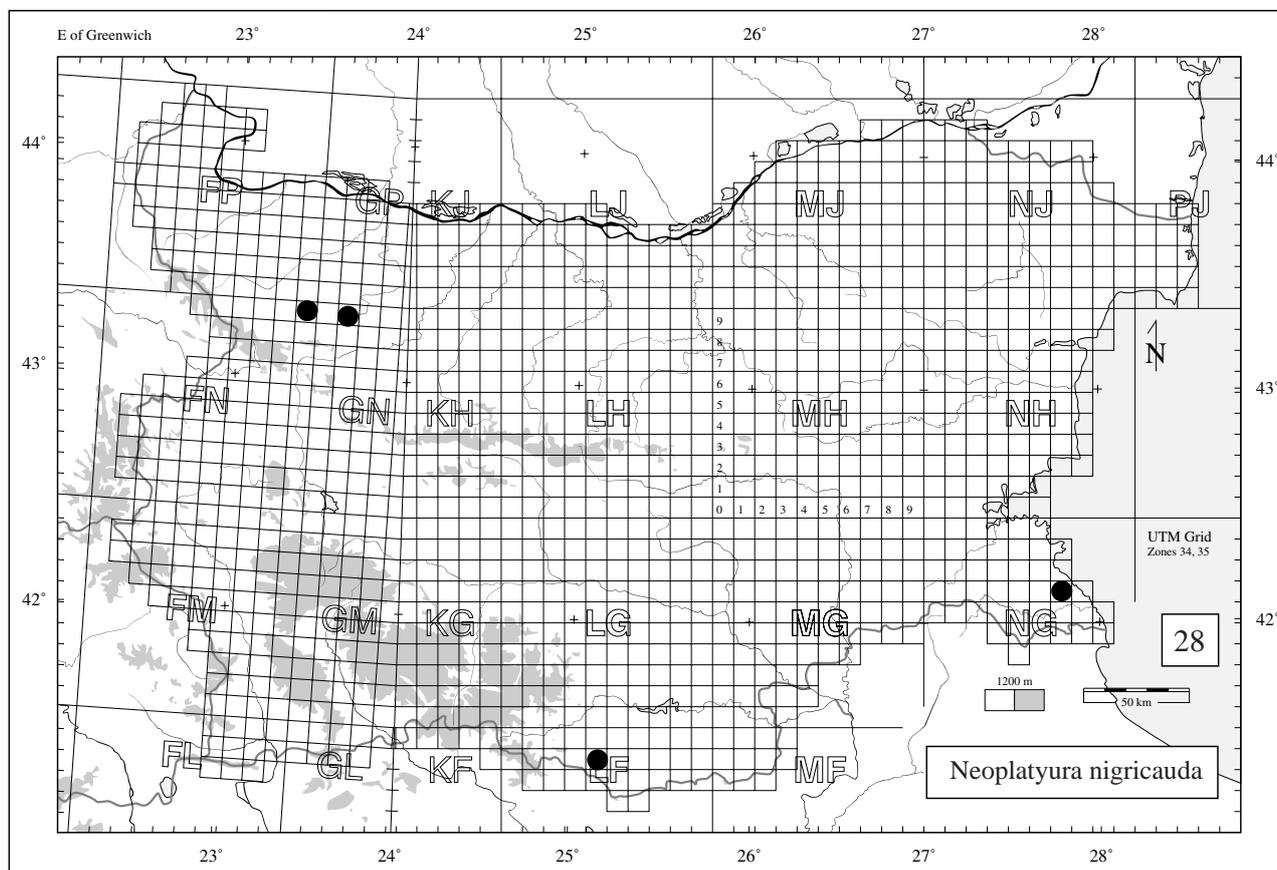
(Map 29)

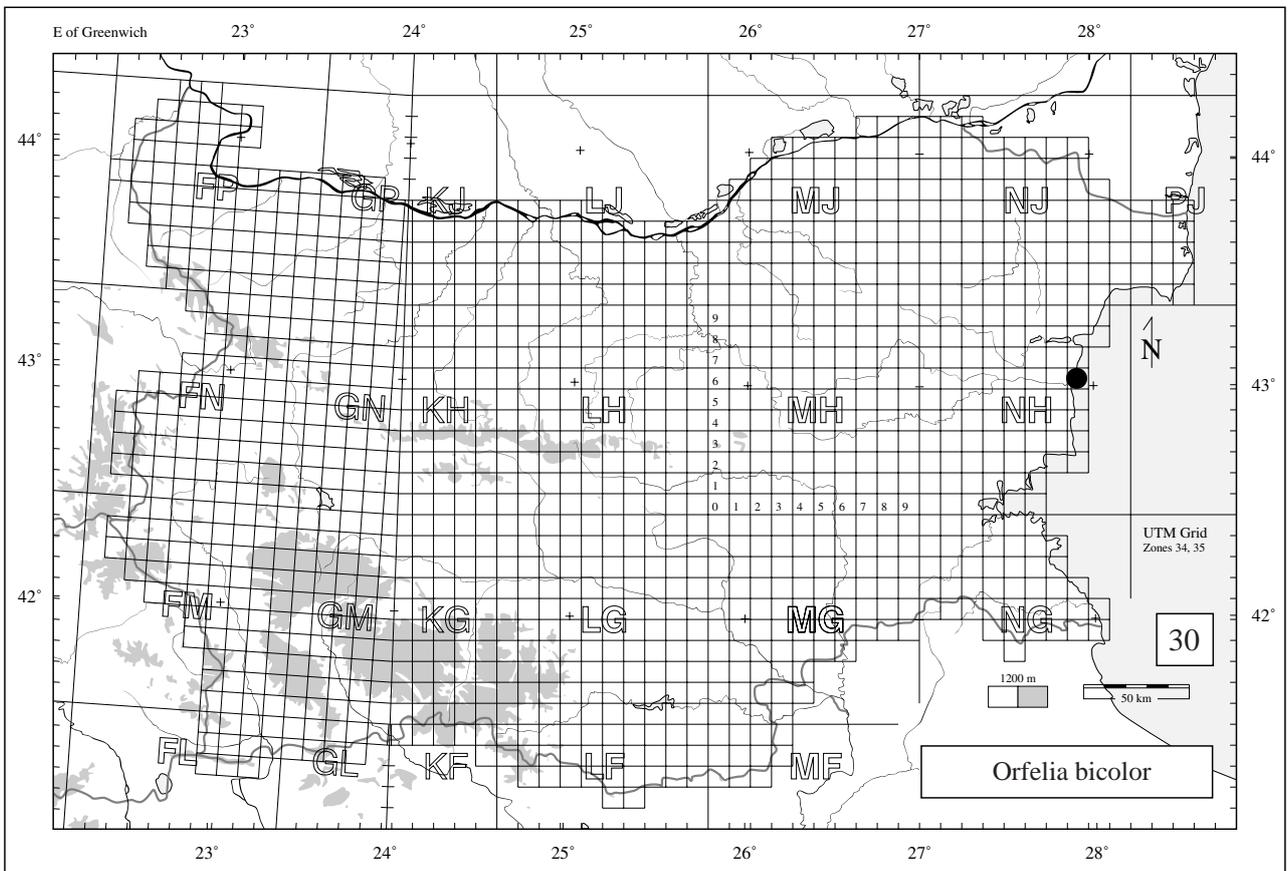
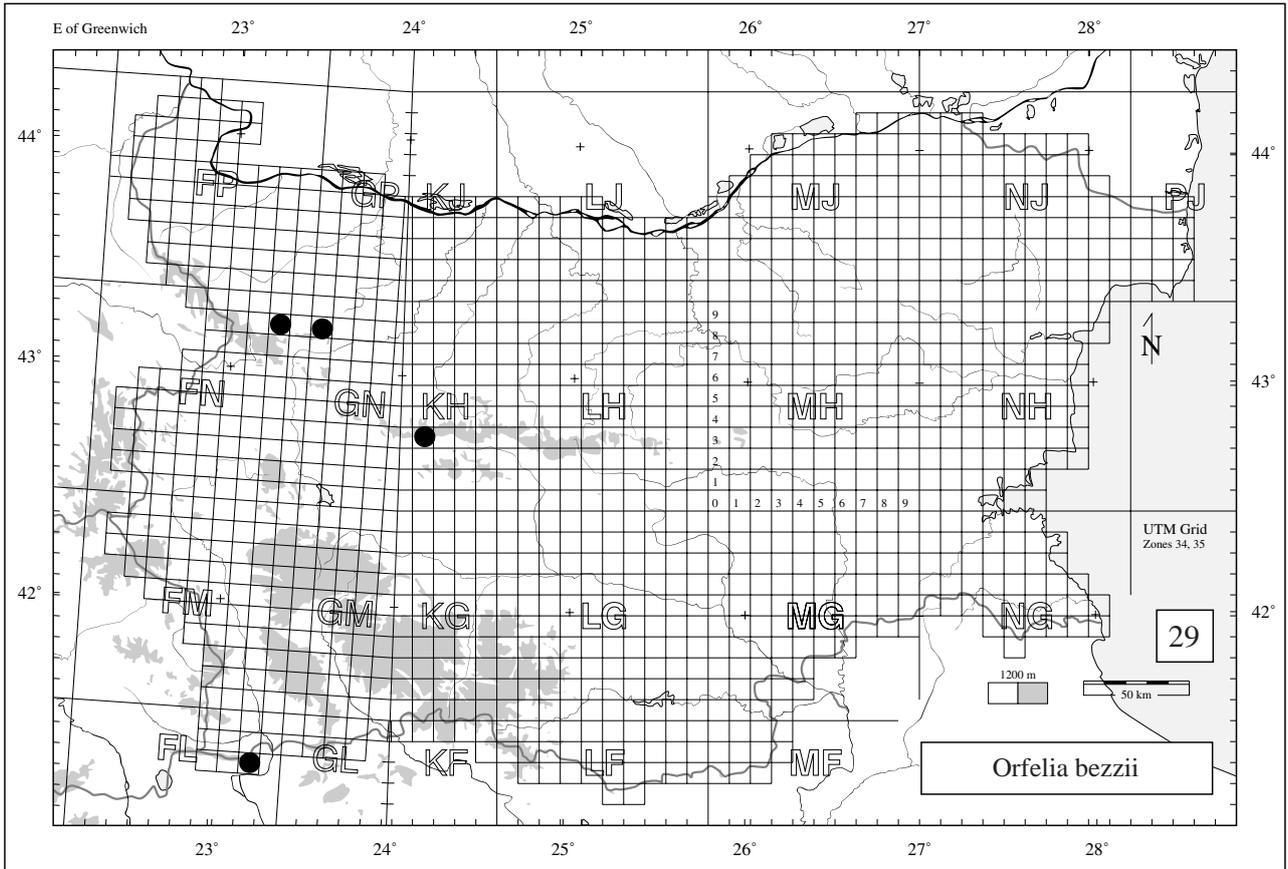
Bechev, 2006a: 93 (1)

Localities: SBW: FN88: Byalata voda, 26.06.1982, 1 ♂ (1); GN08: Vratsa, 26.06.1988, 2 ♂ (1). SBM: KH63: Zlatishki prohod, 18.07.1983, 1 ♂ (1). ROB: FL87: Belasitsa, 23.06.1992, 1 ♂.

Vertical distribution: 350–850 m; XO, MB.

Seasonal activity: VI–VII.





Orfelia bicolor (Macquart, 1826)
(Map 30)

Bechev, 2006a: 93 (1).

Localities: BN: NH76: Kamchia, 8.06.1990, 1♂ (1); 4.07.1985 1♂ (1).

Vertical distribution: 10 m; XO.

Seasonal activity: VI–VII.

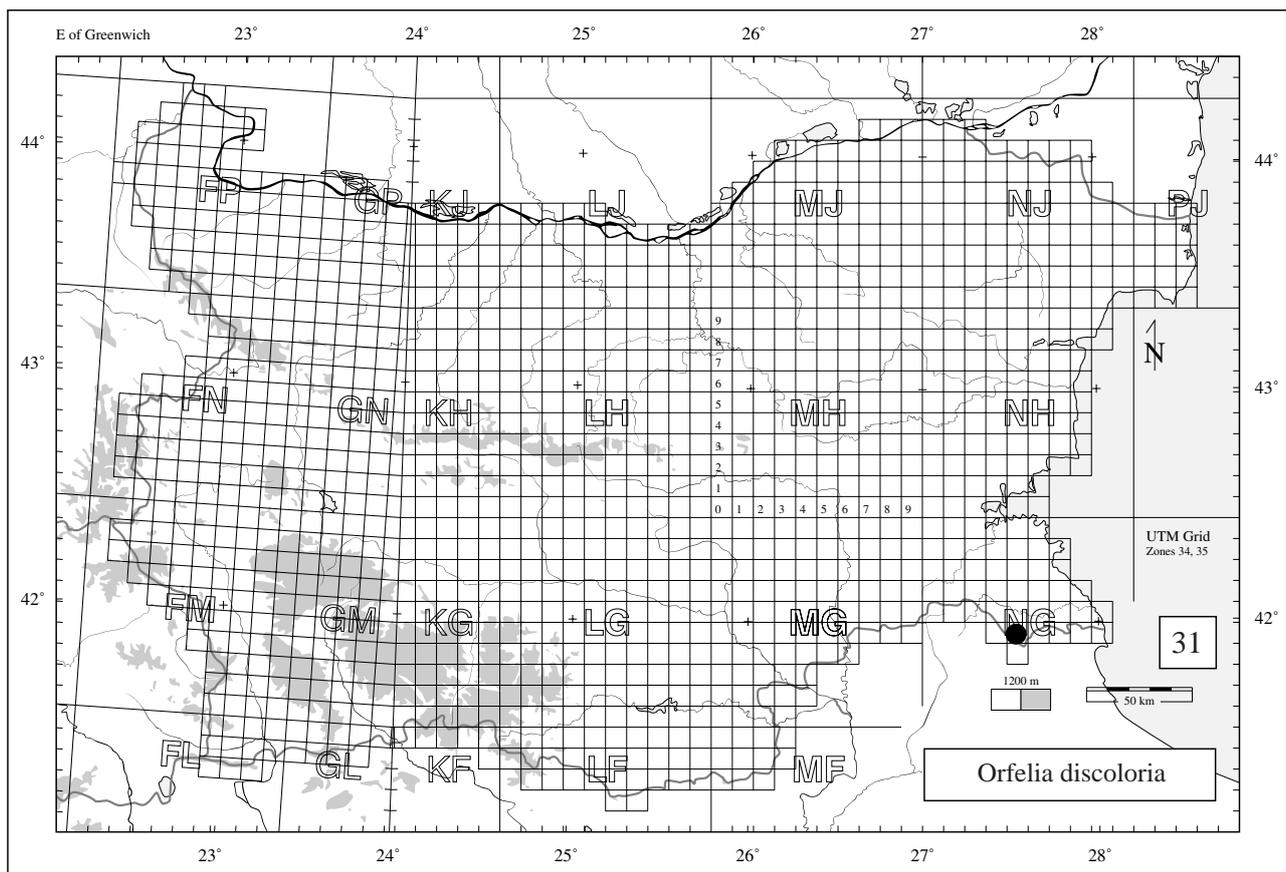
Orfelia discoloria (Meigen, 1818)
(Map 31)

Bechev, 2001: 7 (1); 2002a: 85.

Localities: PBS: NG44: Vitanovo, 15-23.09.1999, 11♂ (1).

Vertical distribution: 200 m; XO.

Seasonal activity: IX.



Orfelia fasciata (Meigen, 1804)

(Map 32)

Bechev, 1986b: 57 (1); 1997: 11; 2000: 57; 2002a: 85; 2004b: 133 (2); 2006b: 702 (3).

Localities: SBW: FN78: Barziya, 26.06.1984, 1♂ (1); FN88: Byalata voda, 30.05.1985, 1♂ (2). ROP: FL88: Petrich, 23.06.1992, 1♂ (2). RRW: GM34: Krastava, 25.07.1994, 1♂ (3).

Vertical distribution: 300–1500 m; XO, MOH, MB, CF.

Seasonal activity: V–VII.

Orfelia gruevi Bechev, 2002

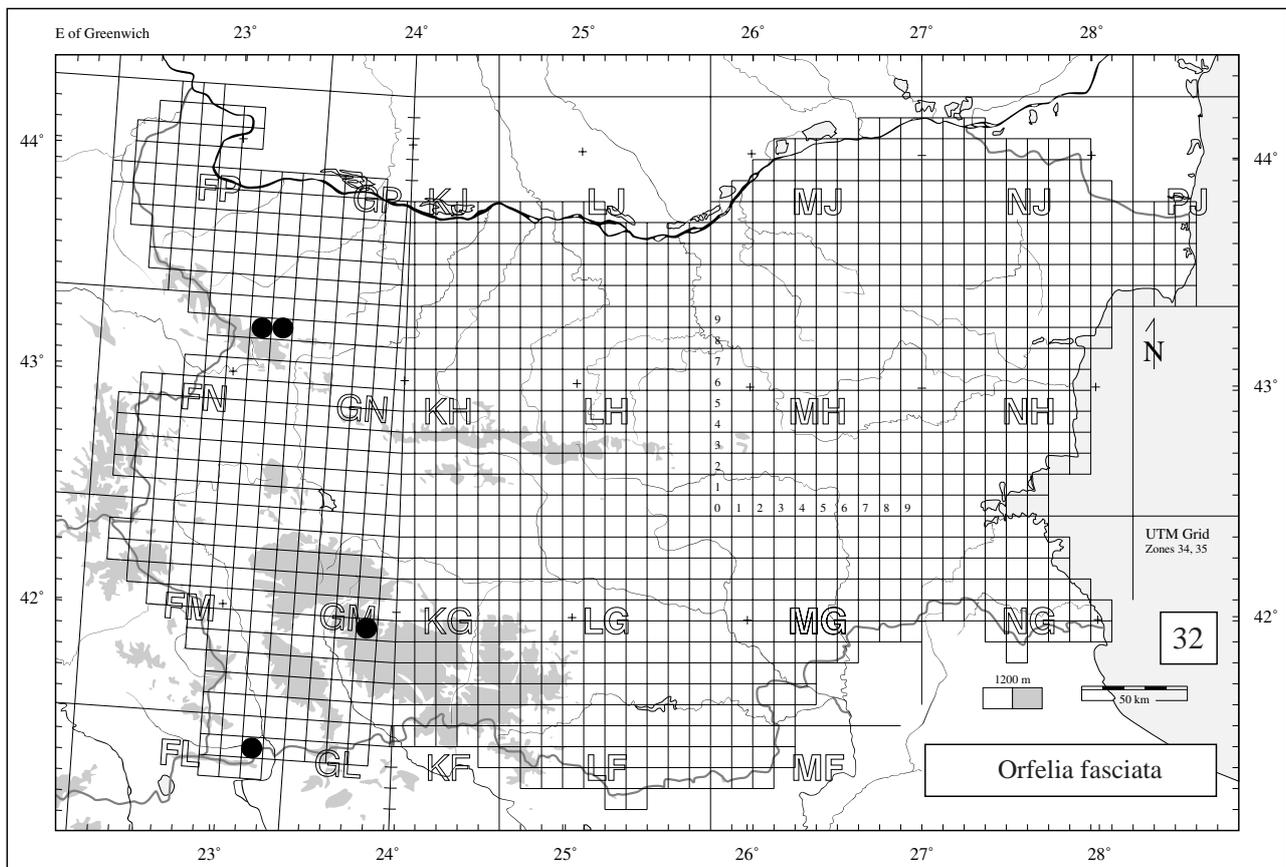
(Map 33)

Bechev, 2002b (1): 199; 2002a: 85.

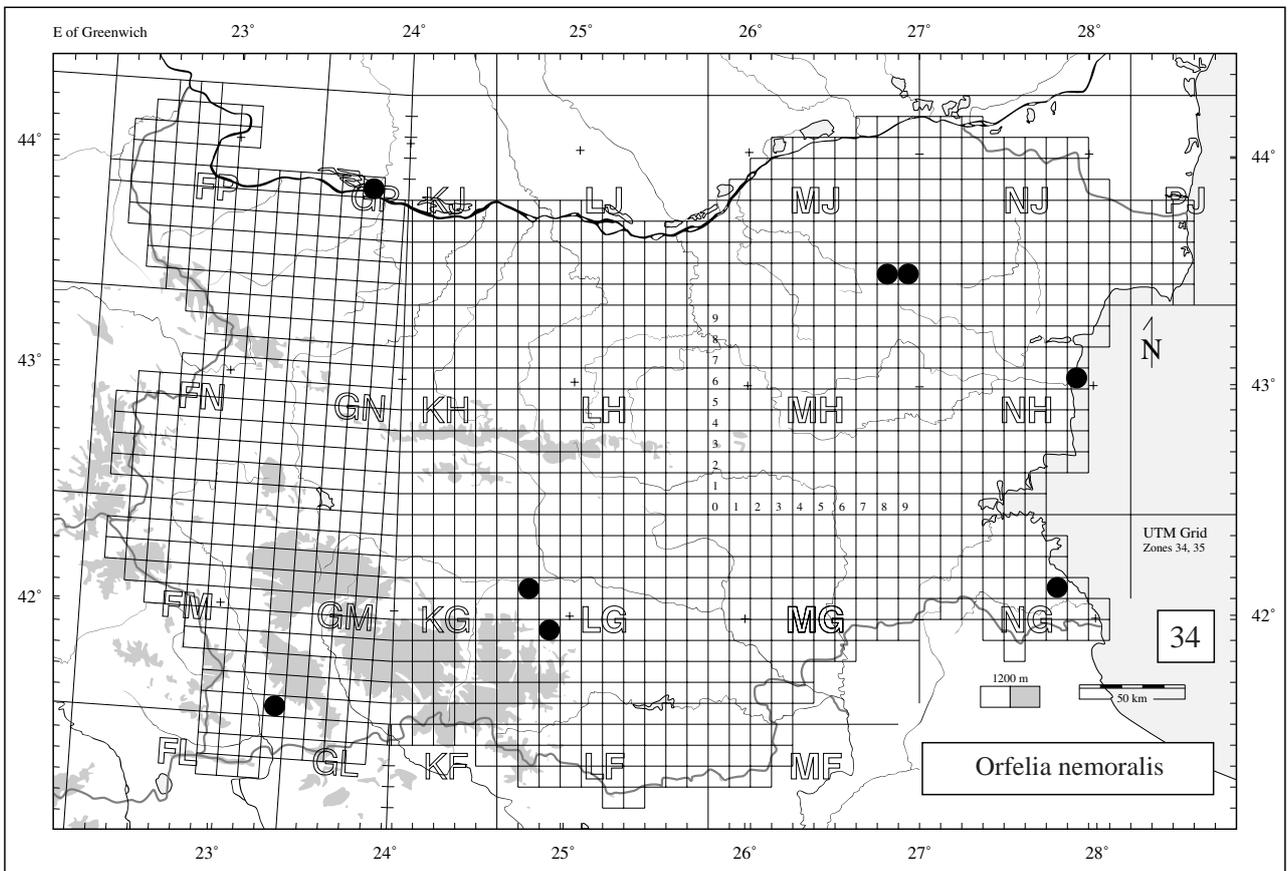
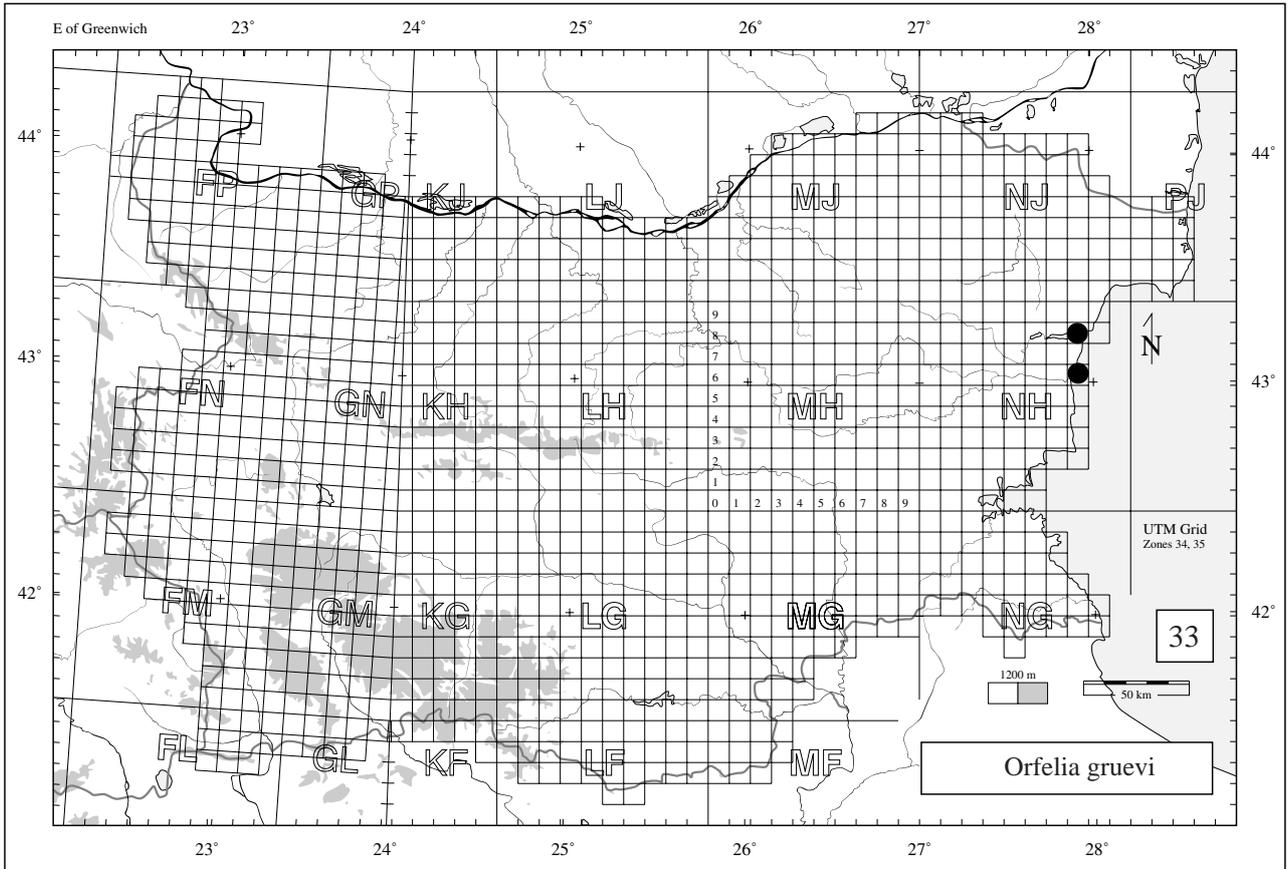
Localities: BN: NH78: Varna, 9.06.1990, 6♂ (1); NH75, Shkorpilovtsi, 8.06.1990, 1♂ (1).

VD: 10–20 m; XO.

Seasonal activity: VI.



THE FUNGUS GNATS OF THE FAMILIES...



Orfelia nemoralis (Meigen, 1818)

(Map 34)

Bechev, 1986b: 57 (1); 2000: 57; 2002a: 85; 2004b: 133 (2); 2006b: 702 (3).

Localities: DWE: GP25: Kozloduy, 13.05.1983, 1♂ (1). DEL: MJ81: Staro selishte, 20.05.1990, 1♂ (2). DEP: MJ91: Bliznatsi, 20.05.1990, 1♂ (2). PT: LG16: Plovdiv, 31.05.1992, 1♂ (2). ROP: FM90: Karlanovo, 23.05.1970, 1♂ (2). RRW: LG24: Martsiganitsa, 15.06.1993, 1♂ (3). BN: NH76: Kamchia, 4.07.1985, 1♂ (2). BS: NG66: Tsarevo, 10.06.1992, 1♂ (2); 29.05.1993, 6♂ (2).

Vertical distribution: 10–1400 m; XO, MOH, MB, CF.

Seasonal activity: V–VII.

Orfelia nigricornis (Fabricius, 1805)

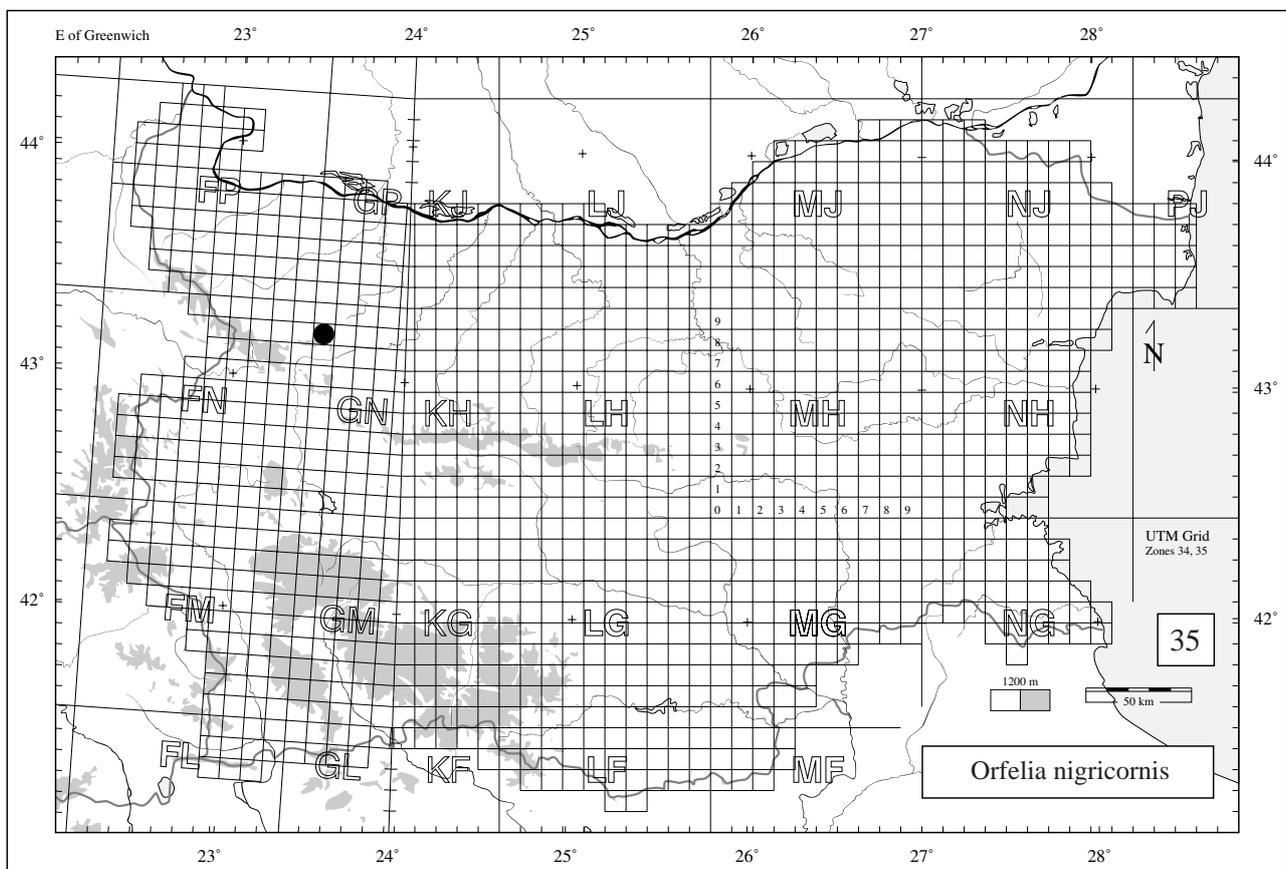
(Map 35)

Bechev, 1990a: 85 (1); 1997: 11; 2000: 57; 2002a: 85; 2004b: 134 (2).

Localities: SBW: GN08: Vratsa, 12.06.1986, 1♂ (1); 11.08.1889, 1♂ (2).

Vertical distribution: 350 m; XO.

Seasonal activity: VI, VIII.



Orfelia tristis (Lundström, 1911)

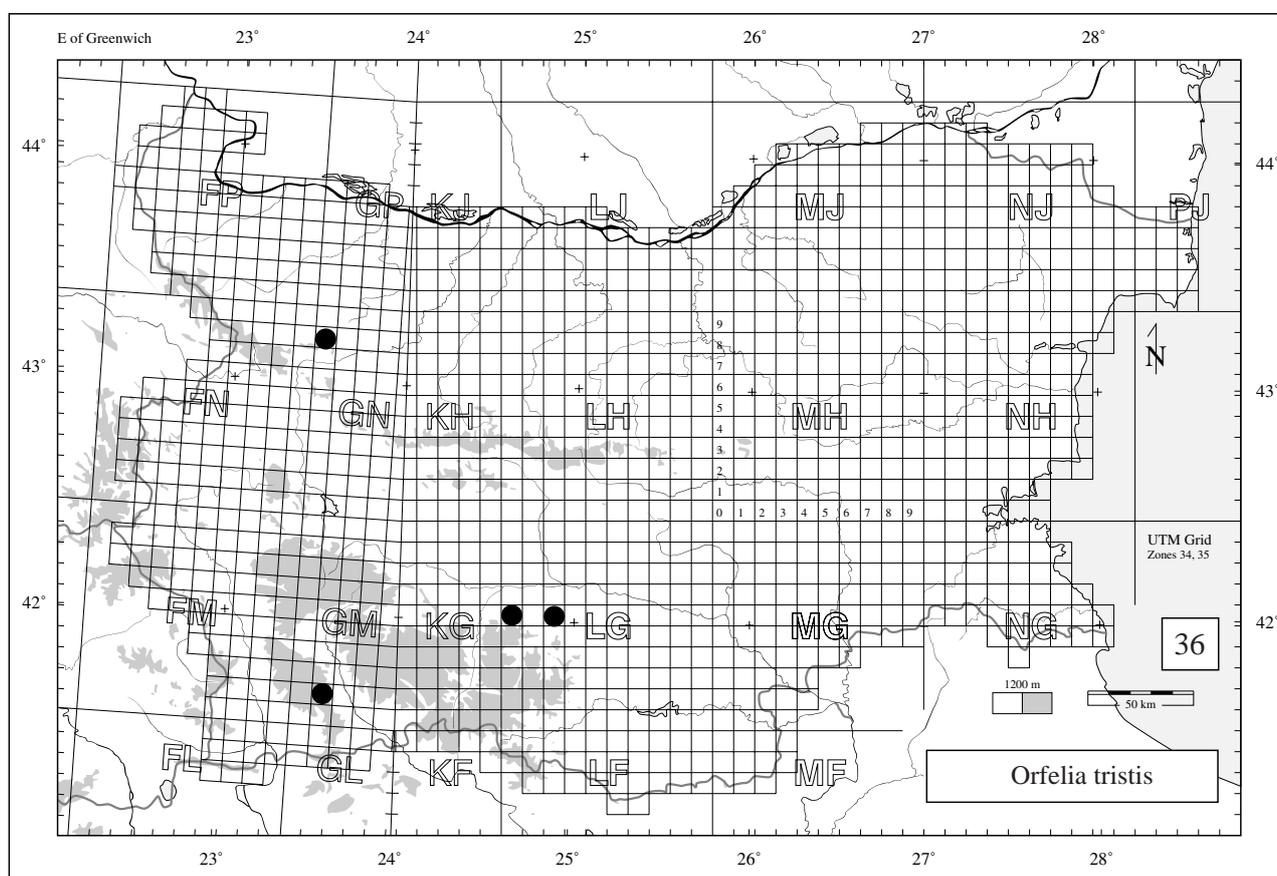
(Map 36)

Bechev, 1990a: 85 (1); 1997: 11; 2000: 57; 2002a: 85; 2004b: 134 (2); 2006b: 703 (3).

Localities: SBW: GN08: Vratsa, 12.06.1986, 1♂ (1); 8.06.1988, 1♂ (2); 15.06.1988, 1♂ (2); 3.07.1988, 1♂ (2); 16.06.1989, 1♂ (2); 25.05.1990, 2♂ (2). RPP: GM11: Popski preslop, 31.05.1972, 1♂ (2). RRW: LG05: Hrabrino, 21.05.2000, 1♂ (3); Dedevo, 27.05.2000, 1♂ (3); LG25: Asenovgrad, 19.06.1992, 2♂ (3).

Vertical distribution: 350–1350 m; XO, MOH, MB, CF.

Seasonal activity: V–VII.



***Orfelia unicolor* (Staeger, 1840)**

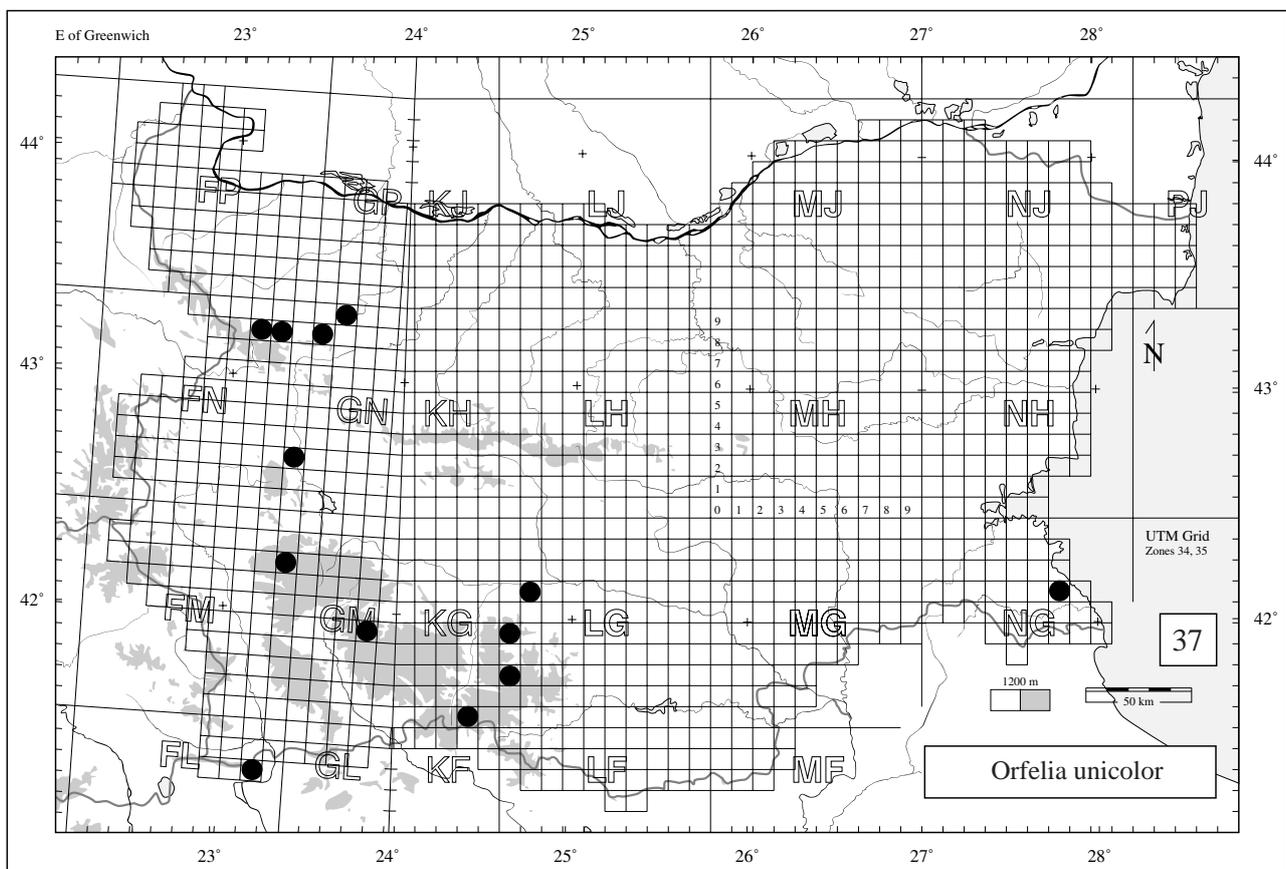
(Map 37)

Platyura unicolor: Nedelkov, 1912:179 (1). *Otfelia discoloria* (Meigen): Bechev, 1985a: 37 (2). *O. unicolor* (Staeger): Bechev, 1997: 11; 2000: 57; 2002a: 85; 2004b: 134 (3); 2006b: 703 (4).

Localities: SPW: GN19: Veslets, 2.09.1983, 1♂ (3). SBW: FN78: Barziya, 26.06.1984, 1♂ (3); Berkovitsa, 31.05.1985, 1♂ (3); FN88: Byalata voda, 26.06.1982, 1♂ (3); GN08: Vratsa, 5.08.1981, 1♂ (3); 22.05.1982, 1♀ (3); 30.06.1982, 1♂ (3); 5.06.1984, 1♂ (3); 8.06.1984, 1♂ (3); 10.06.1984, 1♂ (3); 29.06.1984, 1♂ (3); 28.06.1988, 1♂ (3); 17.07.1989, 1♂ (3). PVS: FN92: Sofia, 07.1934, 1♂ (1, 2). PT: LG16: Plovdiv, 9.06.1997, 1♂ (3). ROB: FL87: Belasitsa, 24.06.1992, 1♂ (3). RPR: FM97: Kirilova polyana, 27.08.1989, 2♂ (3). RRW: GM34: Krastava, 31.08.1991, 1♂ (4); KG80: Trigrad, 1.08.1988, 1♂ (4); LG02: Zabardo, 27.08.1996, 1♂ (4); LG04: Sitovo, 27.08.1990, 1♂ (4); Lilkovo, 27.08.1990, 3♂ (4). BS: NG66: Tsarevo, 29.05.1993, 1♂ (3).

Vertical distribution: 10–1700 m; XO, MOH, MB, CF.

Seasonal activity: V–IX.



Genus *Platyura* Meigen, 1803

Platyura marginata Meigen, 1804

(Map 38)

Bechev, 1991a: 27 (1); 1997: 11; 2000: 57; 2002a: 85; 2004b: 134 (2); 2006b: 703 (3).

Localities: SBW: FN88: Varshets, 9.06.1984, 1♂ (2). RPR: GM38: Kostenets, 22.05.1986, 1♂ (2). RPS: GL18: Goleshovo, 5.06.1988, 1♂ (2). RRW: LG00: Smolyan, 26.05.1996, 1♂ (3); LG04: Byala cherkva, 24.06.2004, 1♀ (3); LG32: Zagrazhden, 8.06.1990, 9♂ (1, 3).

Vertical distribution: 600–1820 m; MOH, MB, CF.

Seasonal activity: V, VI.

Genus *Pyratula* Edwards, 1929

Pyratula oracula Chandler, 1994

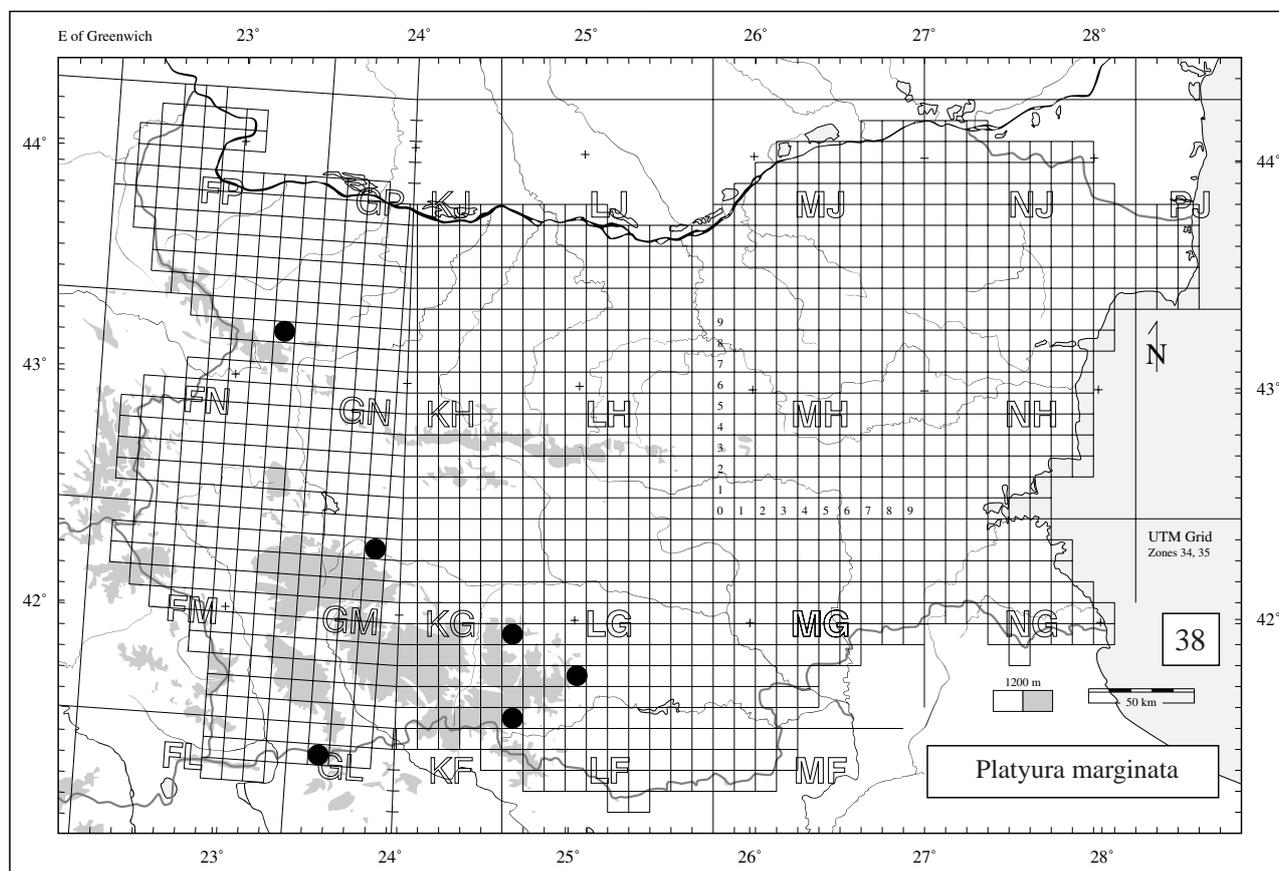
(Map 39)

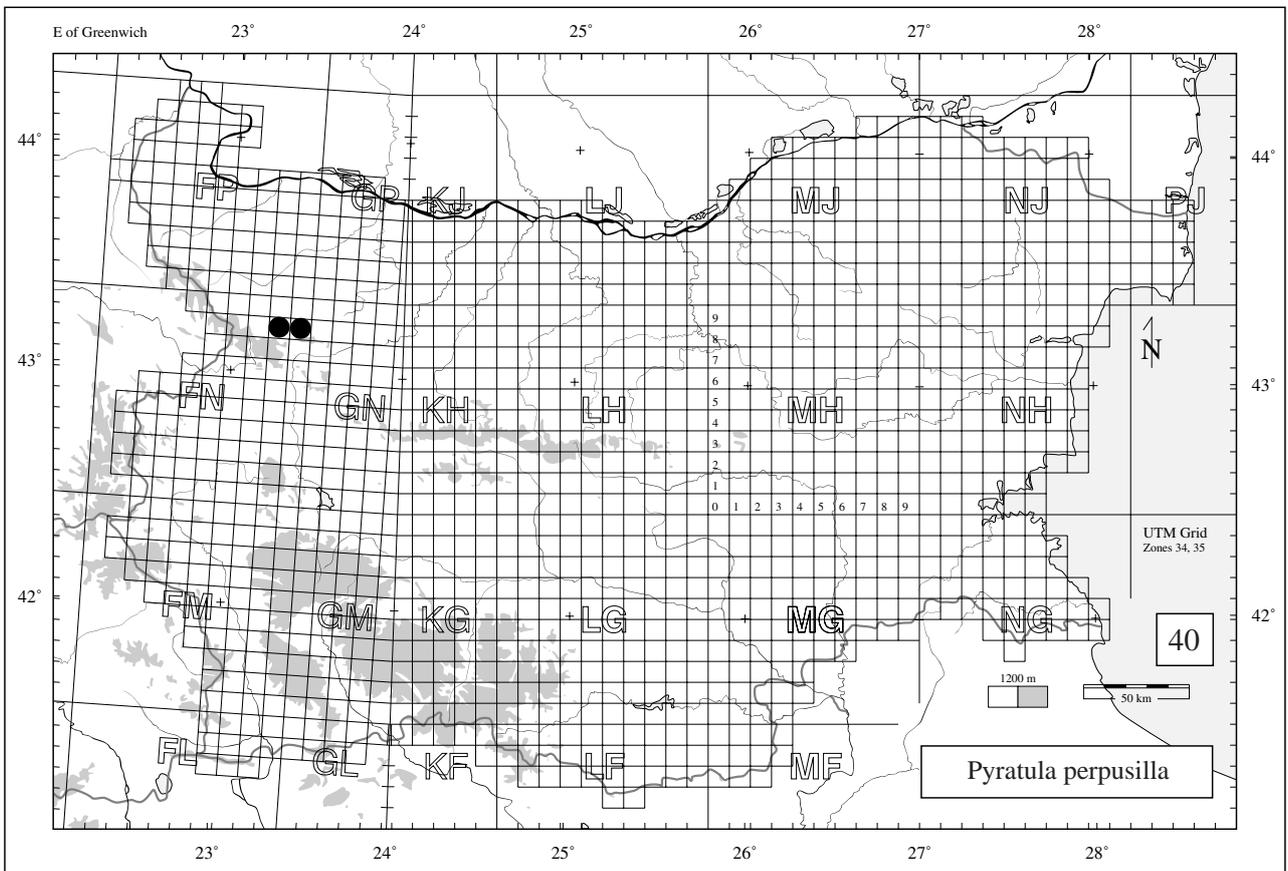
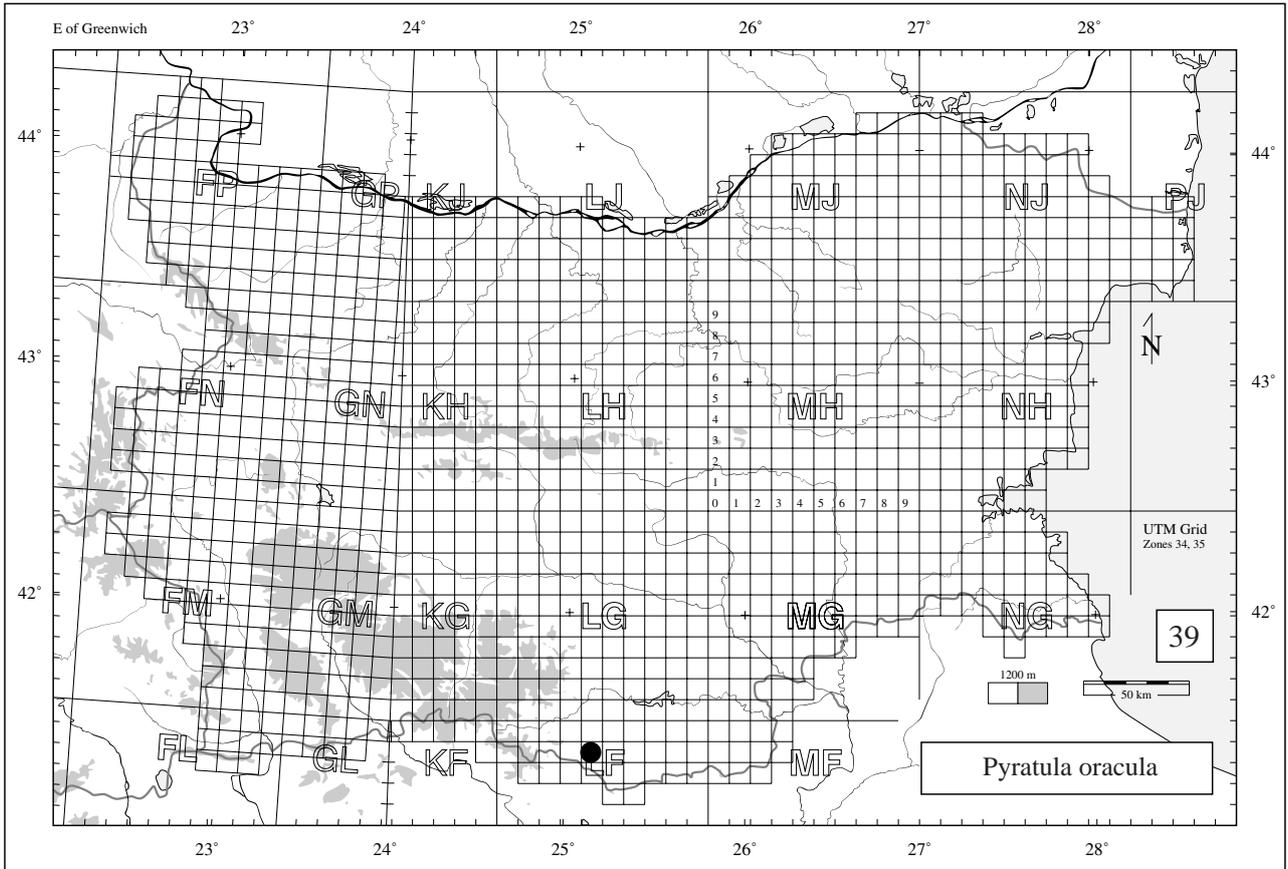
Bechev, 2004a: 736 (1).

Localities: RRE: LF48: Zlatograd, 25.09.1993, 2♂ (1).

Vertical distribution: 450 m; XO.

Seasonal activity: IX.





Pyratula perpusilla (Edwards, 1913)

(Map 40)

Orfelia (*Pyratula*) *perpusilla*: Bechev, 1985a: 37 (1). *Pyratula oracula* Chandler: Bechev, 1996a: 19 (2); 1997: 11; 2000: 57. *P. perpusilla* (Edwards): Bechev, 1997: 11; 2000: 57; 2002a: 85.

Localities: SBW: FN98: Druzhevo, 23.08.1981, 4♂ (1); GN08: Vratsa, 26.06.1988, 1♂ (2).

Vertical distribution: 370–750 m; XO, MB.

Seasonal activity: VI, VIII.

Pyratula subcanariae Chandler, 2001

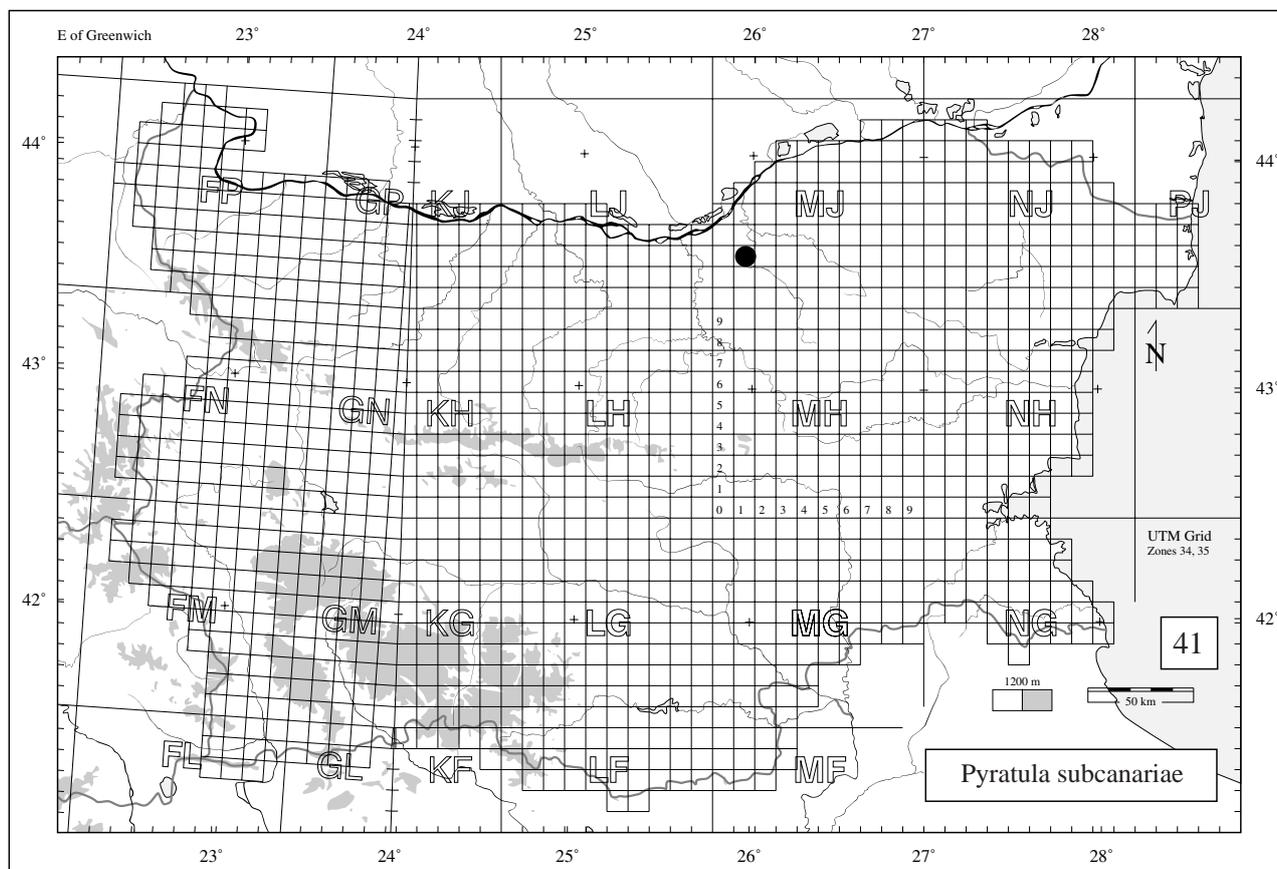
(Map 41)

Bechev, 2006a: 94 (1)

Localities: DEP: MJ12: Orlova chuka, 13.05.1996, 2♂ (1).

Vertical distribution: 200 m; XO.

Seasonal activity: V.



Pyratula zonata (Zetterstedt, 1855)

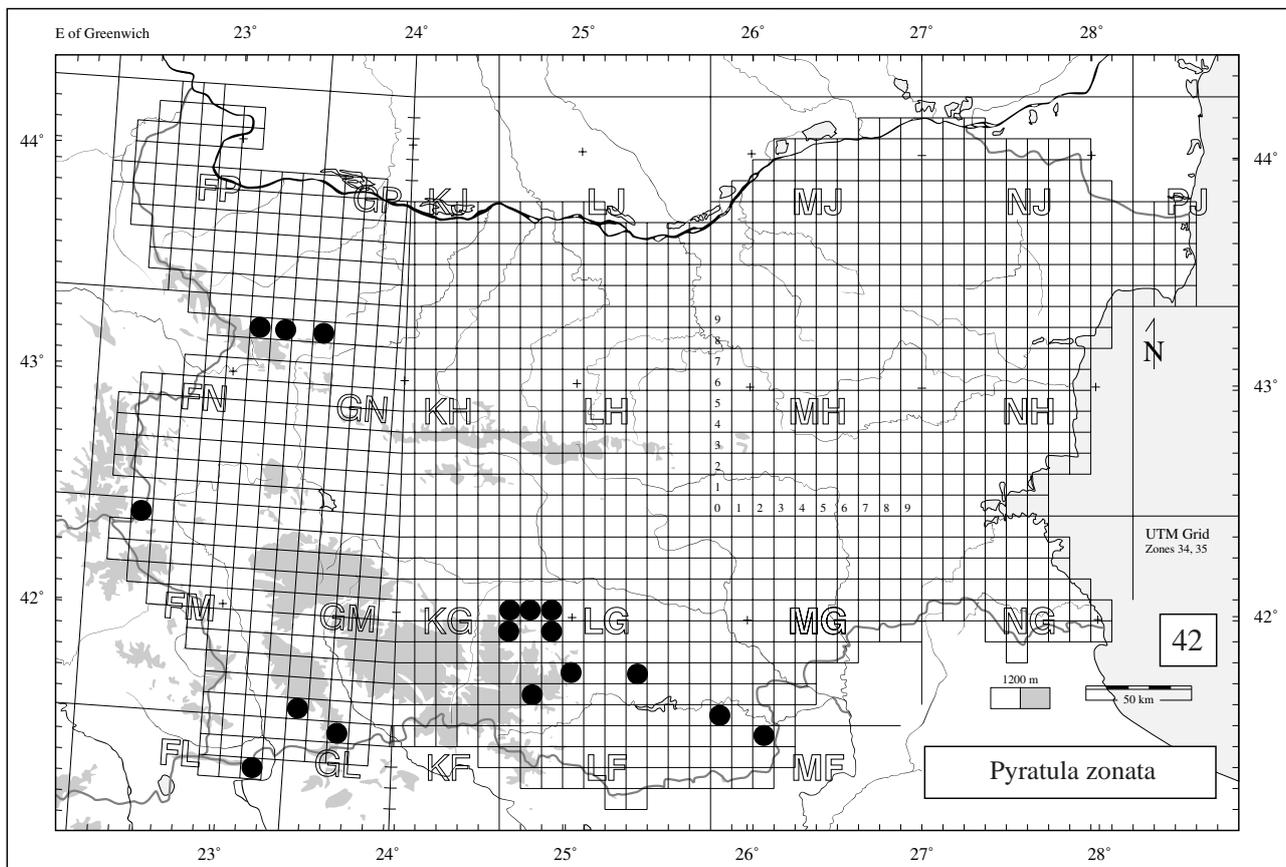
(Map 42)

Orfelia (Pyratula) zonata: Bechev, 1989a: 154 (1). *Pyratula zonata* (Zetterstedt): Bechev, 1997: 11; 2000: 57; 2002a: 86; 2004a: 736 (2); 2004b: 134 (3); 2006b: 703 (4).

Localities: SBW: FN78: Berkovitsa (above of), 30.05.1985, 1♂ (1); FN88: Byalata voda, 10.06.1984, 1♂ (1); 30.05.1985, 1♂ (3); GN08: Vratsa, 13.05.1989, 1♂ (3). PKZ: FM29: Gorno Uyno, 20.05.1989, 1♂ (3). ROB: FL87: Belasitsa, 23.06.1992, 1♂ (3); 29.05.1993, 1♂ (3). ROP: GM00: Rozhenski manastir, 28.05.1993, 1♂ (3). RPS: GL29: Paril, 3.06.1988, 1♂ (3). RRW: LG04: Zdravets, 10.06.2000, 3♂ (4); LG05: Hrabrino, 21.05.2000, 2♂ (4); Izvor, 27.05.2000, 2♂ (4); LG11: Vievo, 29.06.1992, 1♂ (4); LG15: Galabovo, 20.05.2000, 4♂ (4); LG24: Martsiganitsa, 15.06.1993, 1♂ (4); LG25: Asenovgrad, 11.05.1992, 1♂ (4); LG32: Zagrazhden, 8.06.1990, 3♂ (4). RRE: LG62: Chernoochene, 14.05.1991, 1♂ (2); MF29: Ivaylovgrad, 15.05.1991, 1♂ (2); MG00: Popsko, 15.05.1991, 1♂ (2).

Vertical distribution: 350–1400 m; XO, MOH, MB, CF.

Seasonal activity: V, VI.



Genus *Urytalpa* Edwards, 1929

Urytalpa ochracea (Meigen, 1818)

(Map 43)

Bechev, 2001: 7 (1); 2002a: 86; 2006b: 703 (2).

Localities: RRW: LG04: Byala cherkva, 26.06.1990, 1♂ (1, 2).

UTM: LG04.

Vertical distribution: 1620 m; CF.

Seasonal activity: VI.

Urytalpa rhapsodica Chandler, 1995

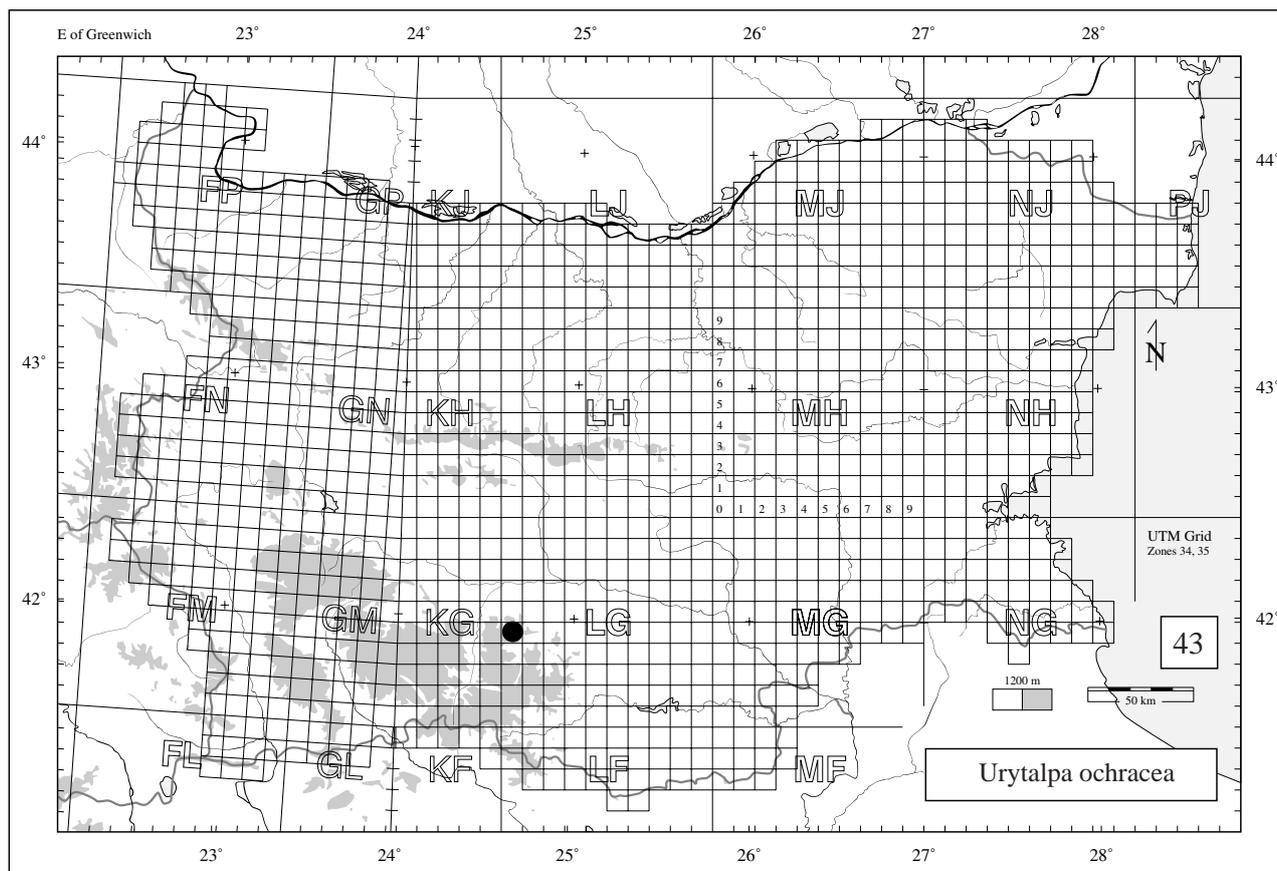
(Map 44)

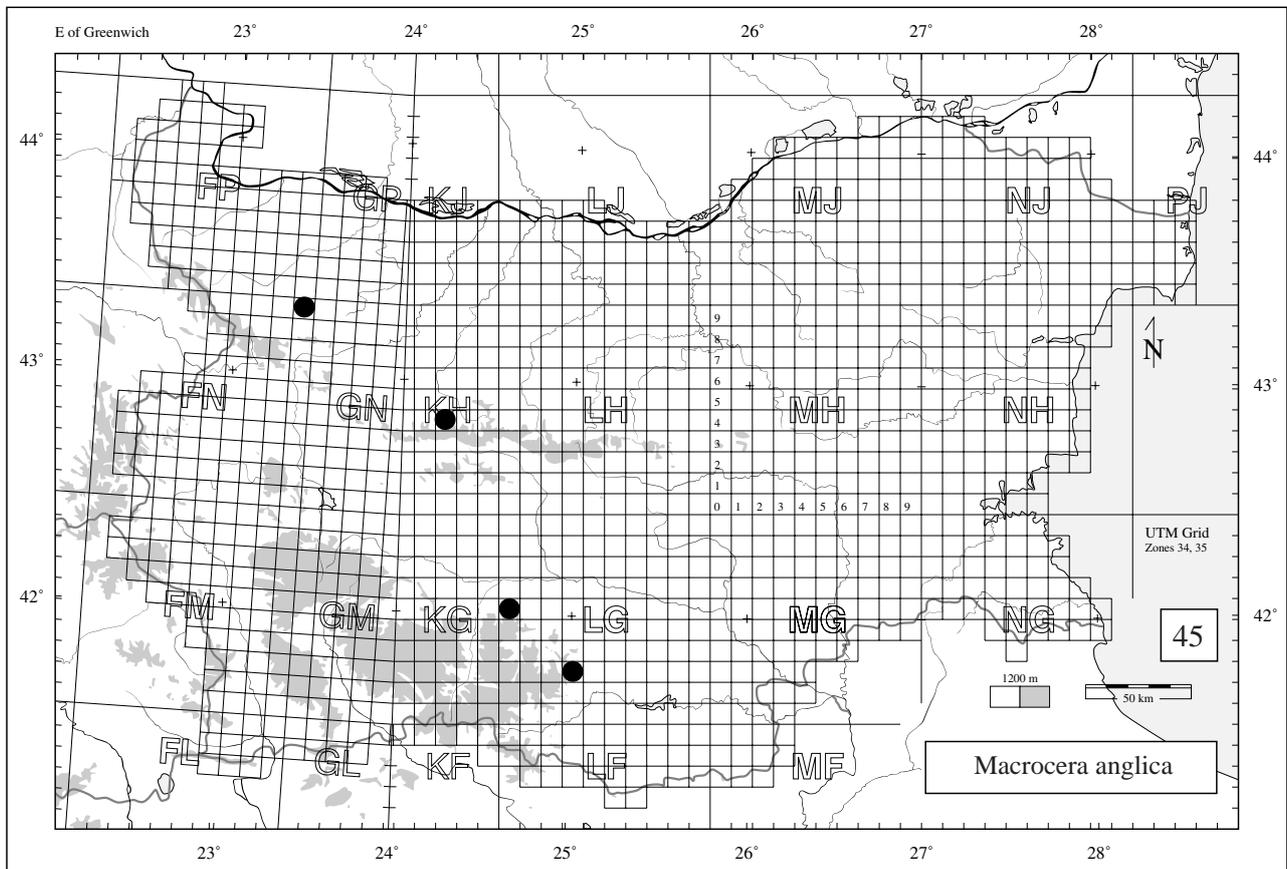
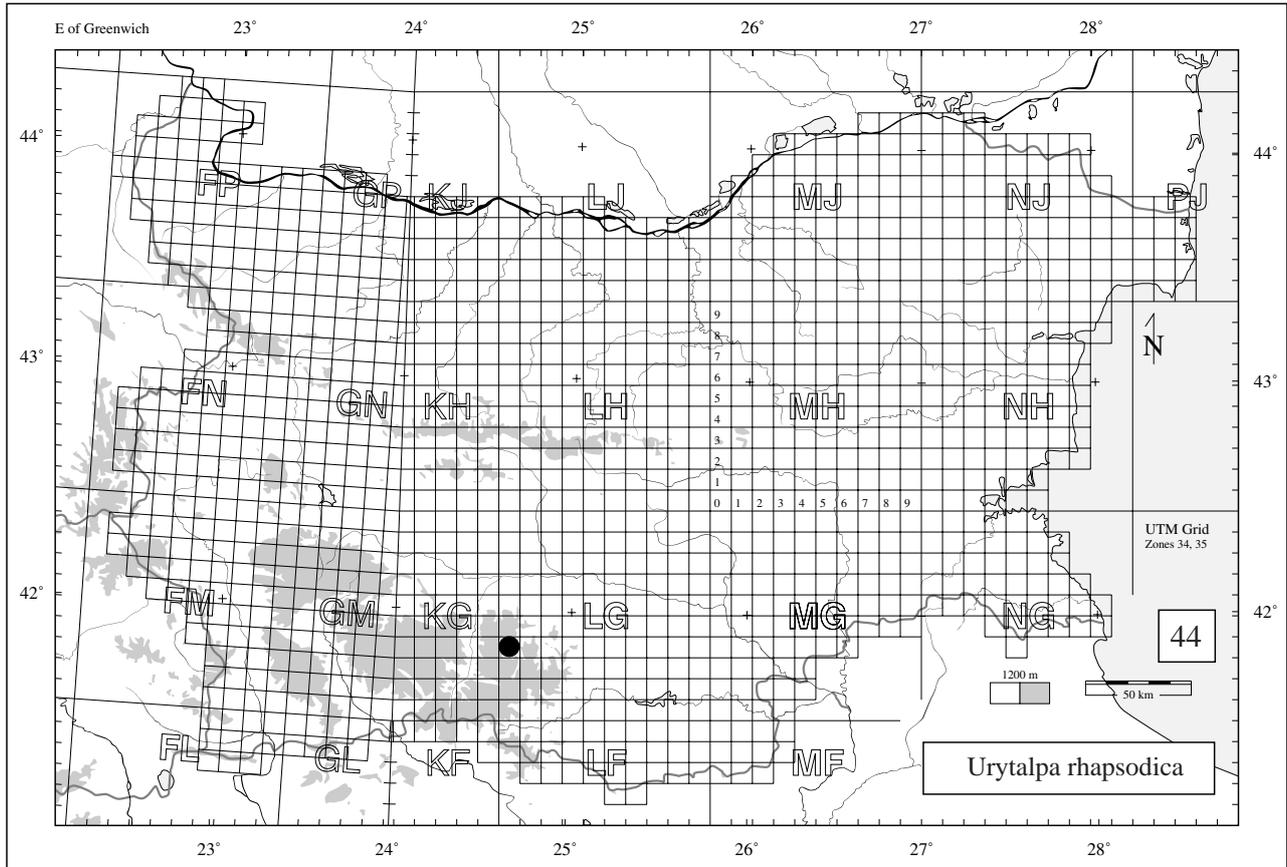
Bechev, 2001: 7 (1); 2002a: 86; 2006b: 703 (2).

Localities: RRW: LG03: Persenk, 29.08.1991, 1♂ (1, 2).

Vertical distribution: 2000 m; CF.

Seasonal activity: VIII.





Subfamily MACROCERINAE
Genus *Macrocera* Meigen, 1803

***Macrocera anglica* Edwards, 1925**
(Map 45)

Bechev, 1986b: 56 (1); 1997: 11; 2000: 57; 2002a: 86; 2004b: 134 (2); 2006b: 703 (3).

Localities: SBW: FN99: Matnitsa, 10.07.1982, 1♂, 1♀ (1). SBM: KH74: Boatin, 7.09.1984, 3♂, 2♀ (2). RRW: LG05: Hrabrino, 21.05.2000, 1♂ (3); LG32: Kormisosh, 11.07.1991, 1♂ (3).

Vertical distribution: 350–1000 m; XO, MB.

Seasonal activity: V, VII, IX.

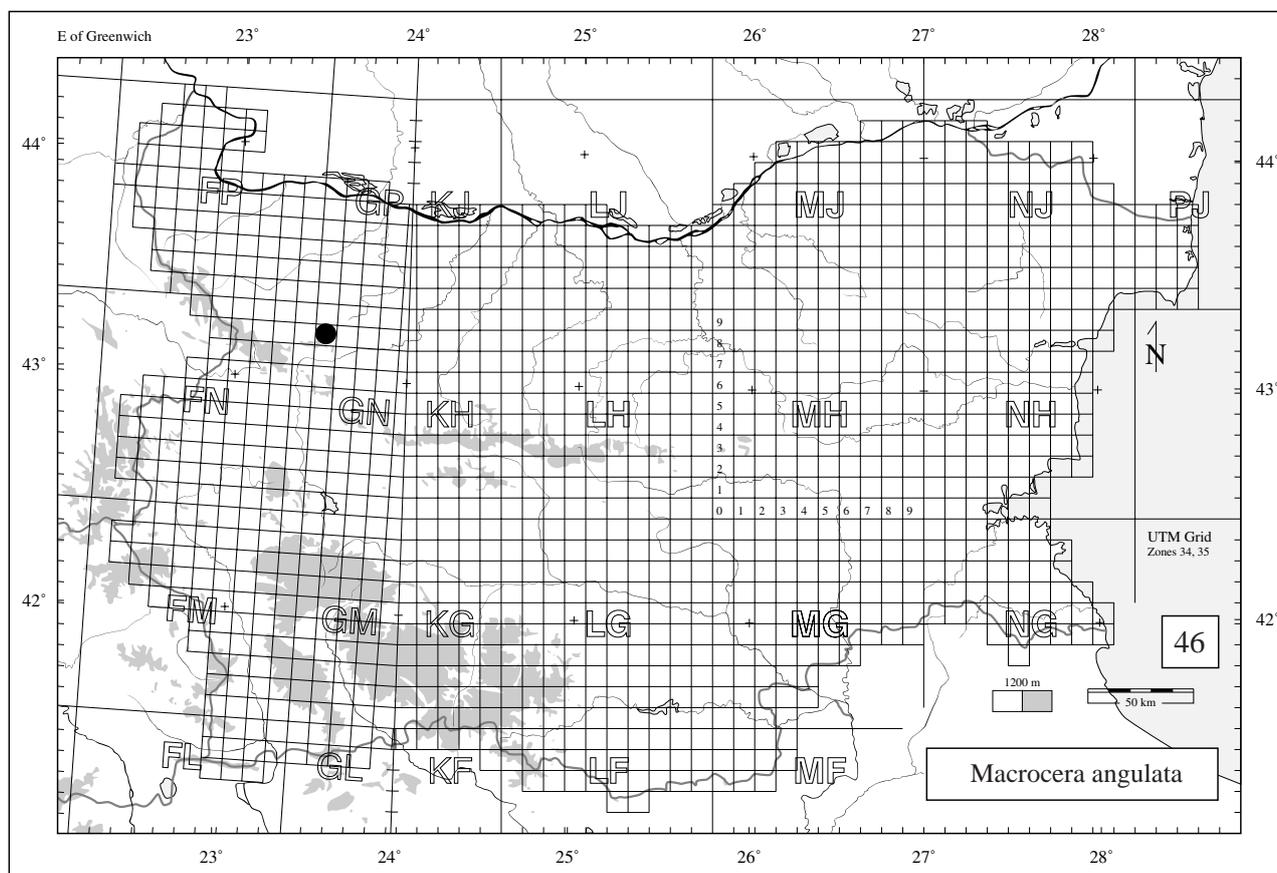
***Macrocera angulata* Meigen, 1818**
(Map 46)

Bechev, 1986b: 56 (1); 1997: 11; 2000: 57; 2002a: 86.

Localities: SBW: GN08: Vratsa, 28.04.1981, 2♂ (1); 5.08.1981, 1♂, 3♀ (1).

UTM: GN08.

Seasonal activity: IV, VIII.



Macrocera centralis Meigen, 1818

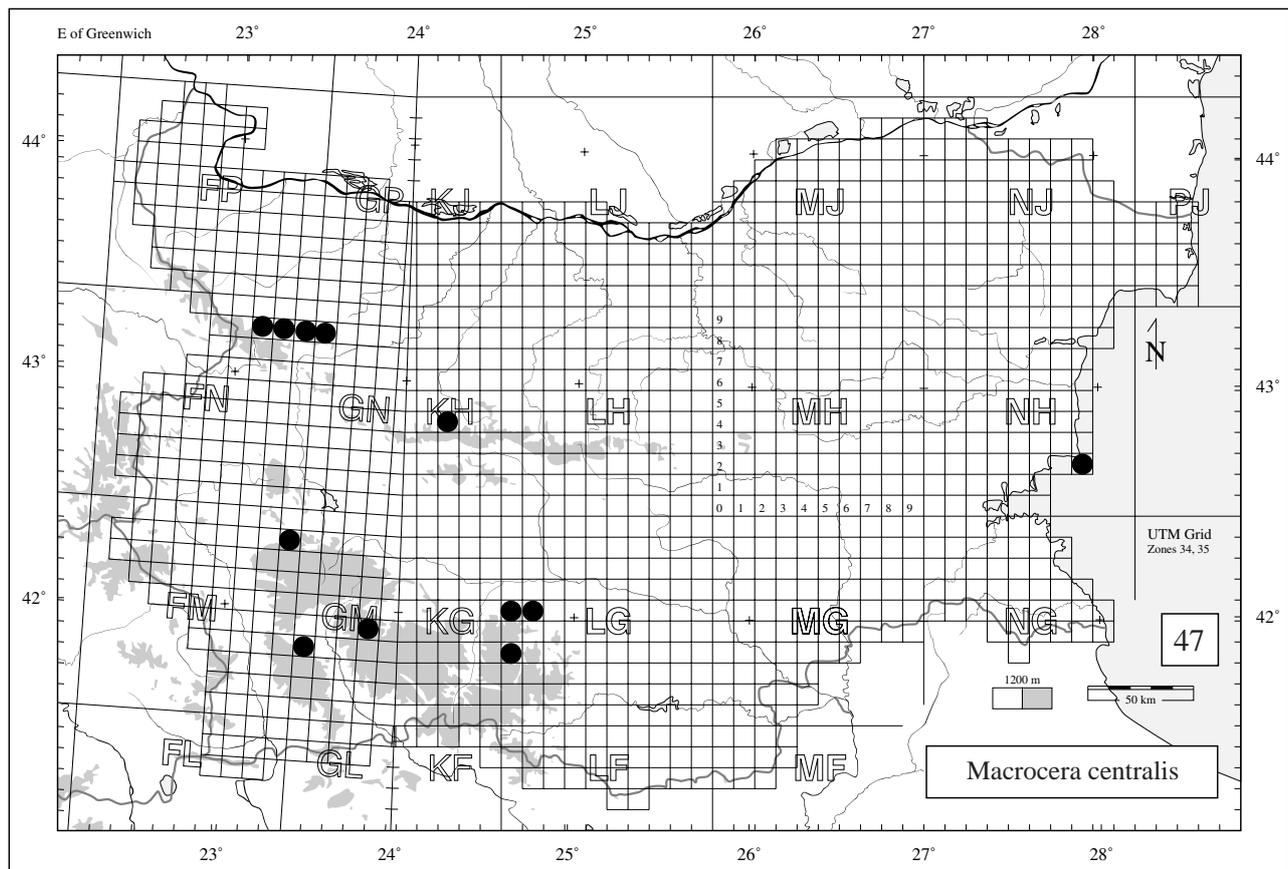
(Map 47)

Bechev, 1985a: 37 (1); 1997: 11; 2000: 57; 2002a: 86; 2004a: 736 (2); 2004b: 134 (3); 2006b: 703 (4).

Localities: SBW: FN78: Berkovitsa (above of), 25.08.1981, 1♂ (1); FN88: Byalata voda, 10.06.1984, 3♂, 1♀ (3); 30.05.1985, 1♂ (3); Varshets, 9.06.1984, 1♂ (3); FN98: Druzhevo, 25.08.1981, 1♂ (3); GN08: Ledenika, 3.09.1983, 1♂ (3). SBM: KH74: Boatin, 6.06.1982, 1♂, 2♀ (3); 7.09.1984, 2♂ (3). RPR: FM97: Kirilova polyana, 27.08.1989, 1♂ (3). RPP: GM03: Banderitsa, 19.08.1997, 1♂ (3). RRW: GM34: Krastava, 2.08.1992, 1♂ (4); LG03: Chudnite mostove, 18.08.1999, 1♂ (4); LG05: Hrabrino, 9.05.1998, 1♂ (4); 21.05.2000, 1♂ (4); LG15: Kuklen, 20.05.2000, 1♂ (4). RRE: LG61: Kardzhali, 14.05.1991, 3♂ (2); MG11: Dabovets, 1♂ (2). BN: NH72: Emine, 20.05.1990, 1♂ (3).

Vertical distribution: 150–1820 m; XO, MOH, MB, CF.

Seasonal activity: V, VI, VIII, IX.



Macrocera crassicornis Winnertz, 1863

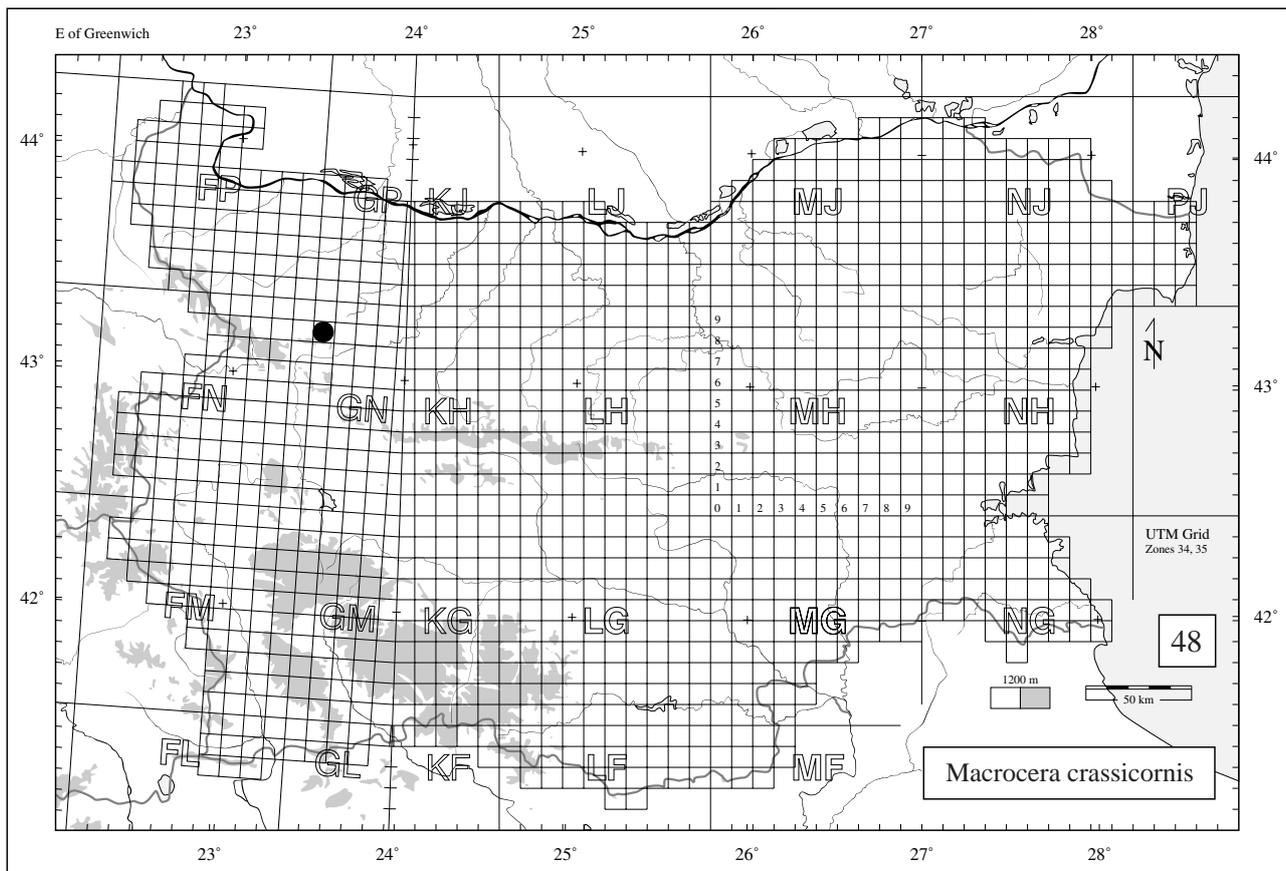
(Map 48)

Bechev, 2000: 57; 2002a: 86.

Localities: SBW: GN08: Vratsa, 10.07.1982, 1♂.

Vertical distribution: 350 m; XO.

Seasonal activity: VII.



Macrocera fasciata Meigen, 1804

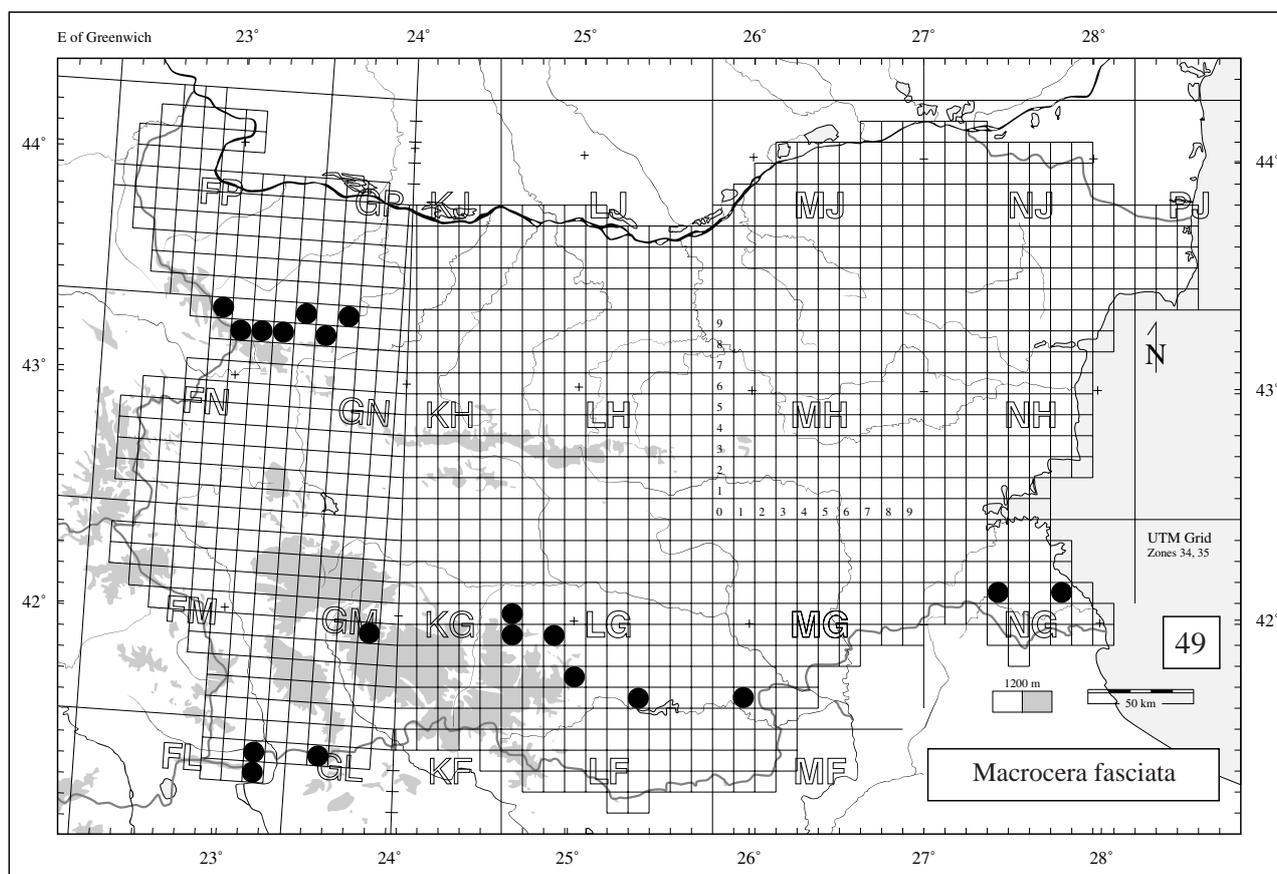
(Map 49)

Bechev, 1989a: 154 (1); 1997: 11; 2000: 57; 2002a: 86; 2004a: 736 (2); 2004b: 134 (3); 2006b: 703 (4).

Localities: SPW: FN88: Spanchevtsi, 23.05.1982, 1♂ (3); GN19: Veslets, 4.06.1982, 1♂ (1); 2.09.1983, 1♂ (3); 20.10.1983, 1♂ (3). SBW: FN59: Dalgi del, 24.07.1983, 1♂ (1); FN68: Kom (N of), 20.08.1982, 1♂ (1); FN78: Barziya, 26.06.1984 (3); FN99: Matnitsa, 10.07.1982, 2♂ (3); 20.08.1982, 2♂ (3); GN08: Vratsa, 5.08.1982, 1♂ (3); Ledenika, 3.09.1983, 4♂ (3); Parshevitsa, 8.06.1984, 1♂ (1). PBS: NG36: Mladezhko, 26.09.1989, 1♂ (3); NG66: Silkosia, 26.09.1989, 1♂ (3). ROB: FL87: Belasitsa, 24.06.1992, 4♂ (3). ROP: FL88: Petrich, 20.05.1990, 3♂ (3); 22.06.1992, 1♂ (3). RPS: GL18: Goleshovo, 5.06.1988, 2♂ (3). RRW: GM34: Krastava, 8.08.1991, 1♂ (4); LG04: Sitovo, 27.08.1999, 1♂ (4); LG05: Hrabrino, 1.06.1981, 1♂ (4); Izvor, 27.05.2000, 1♂ (4); Dedevo, 27.05.2000, 1♂ (4); LG24: Bachkovo, 24.05.1993, 1♂ (4); LG32: Kormisosh, 11.07.1991, 3♂ (4). RRE: LG61: Kardzhali, 14.05.1991, 1♂ (2); MG11: Dabovets, 27.09.1992, 2♂ (2).

Vertical distribution: 180–1700 m; XO, MOH, MB, CF.

Seasonal activity: V–X.



Macrocera fastuosa Loew, 1869

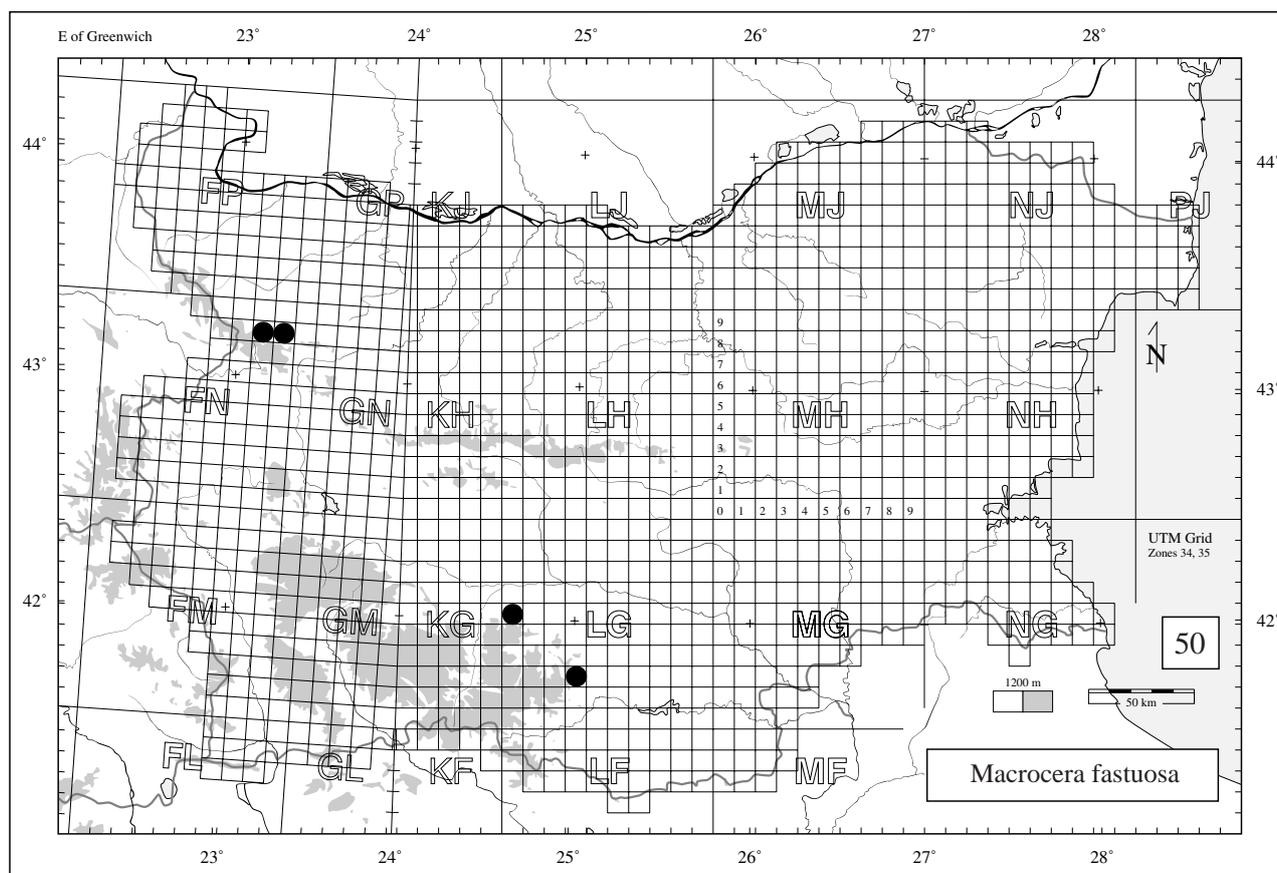
(Map 50)

Bechev, 1986b: 56 (1); 1997: 11; 2000: 57; 2002a: 86; 2006b: 703 (2).

Localities: SBW: FN78: Berkovitsa (above of), 8.07.1982, 1♂ (1); FN88: Byalata voda, 10.07.1982, 1♂ (1); RRW: LG05: Boykovo, 13.09.2000, 1♂ (2); LG32: Kormisosh, 11.07.1991, 1♀ (2).

Vertical distribution: 700–1100m; MB.

Seasonal activity: VII, IX.



Macrocera gemagea Bechev, 1991

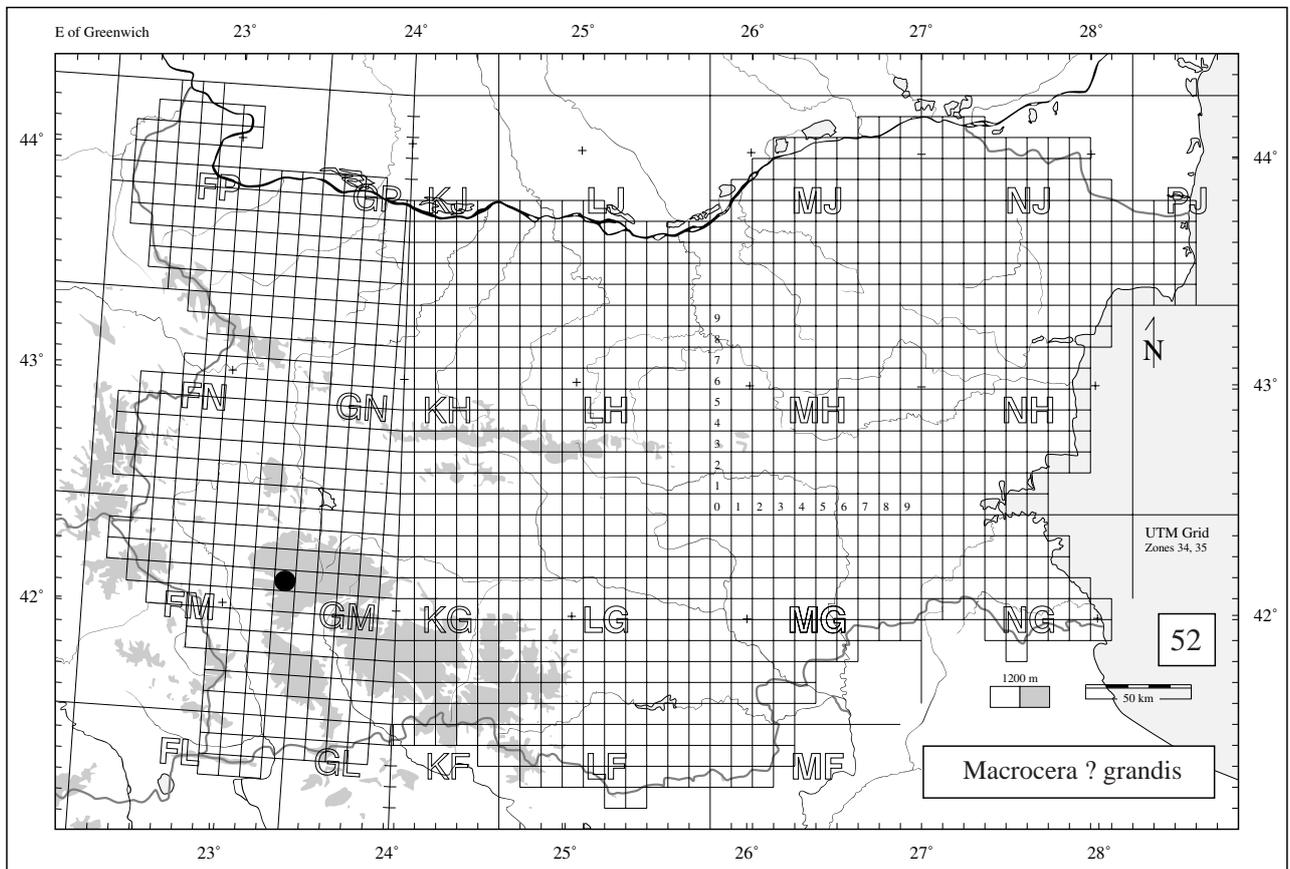
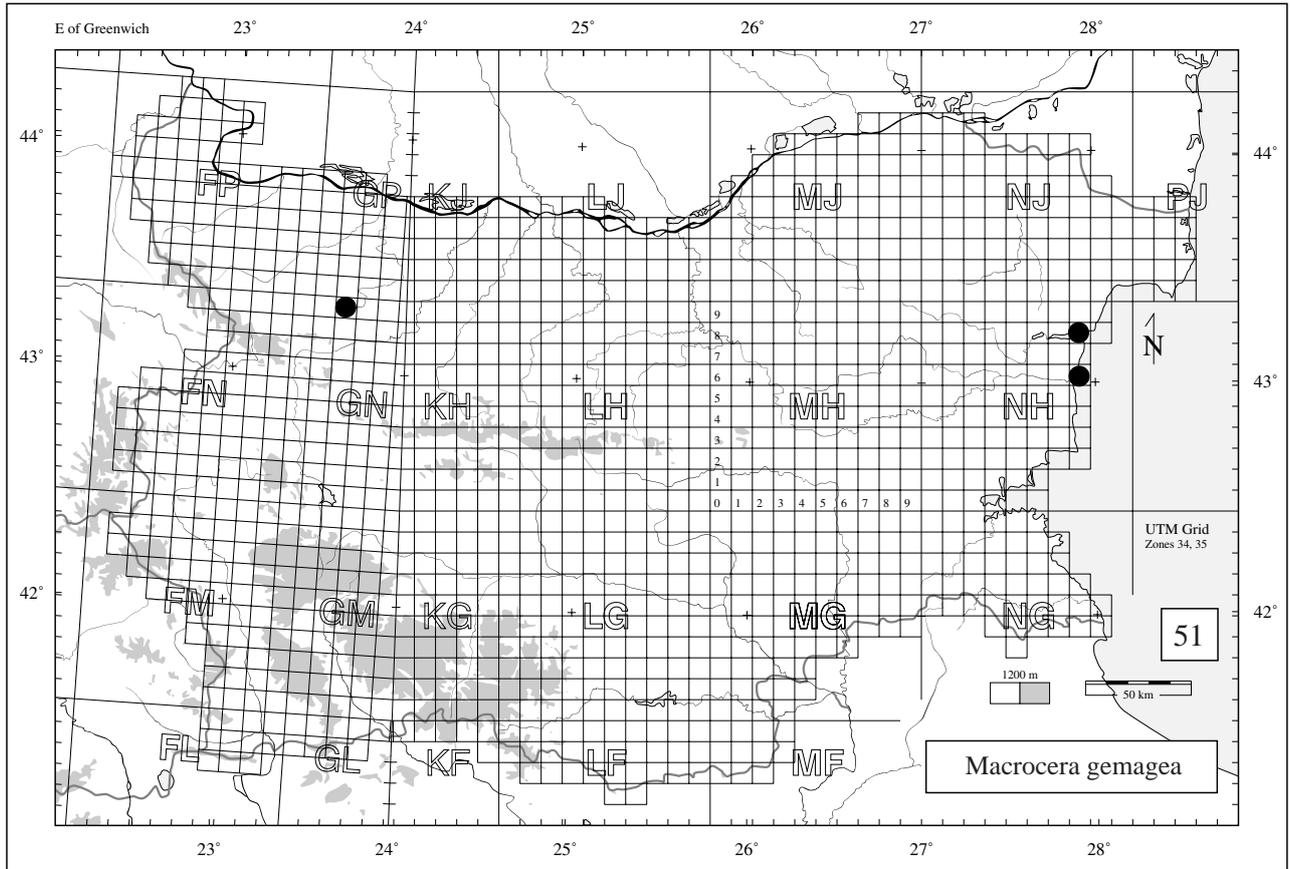
(Map 51)

Bechev, 1991b: 185 (1); 1997: 11; 2000: 57; 2002a: 86; 2006a: 94 (2).

Localities: SPW: GN19: Veslets, 20.07.1982, 1♂ (1).

BN: NH76: Shkorpilovtsi, 8.06.1990, 1♂, 1♀ (2); NH78: Varna, 9.06.1990, 1♂; 1♀ (2).

Vertical distribution: 20–550 m; XO.



Macrocera grandis Lundsrtöm, 1912
(Map 52)

Bechev, 2006a: 94 (1)

Localities: RPR: FM96: Rilski manastir, 27.08.1989, 1♀ (1).

Vertical distribution: 1150 m; MB.

Seasonal activity: VIII.

Remarks: Reported on the base of single female only.

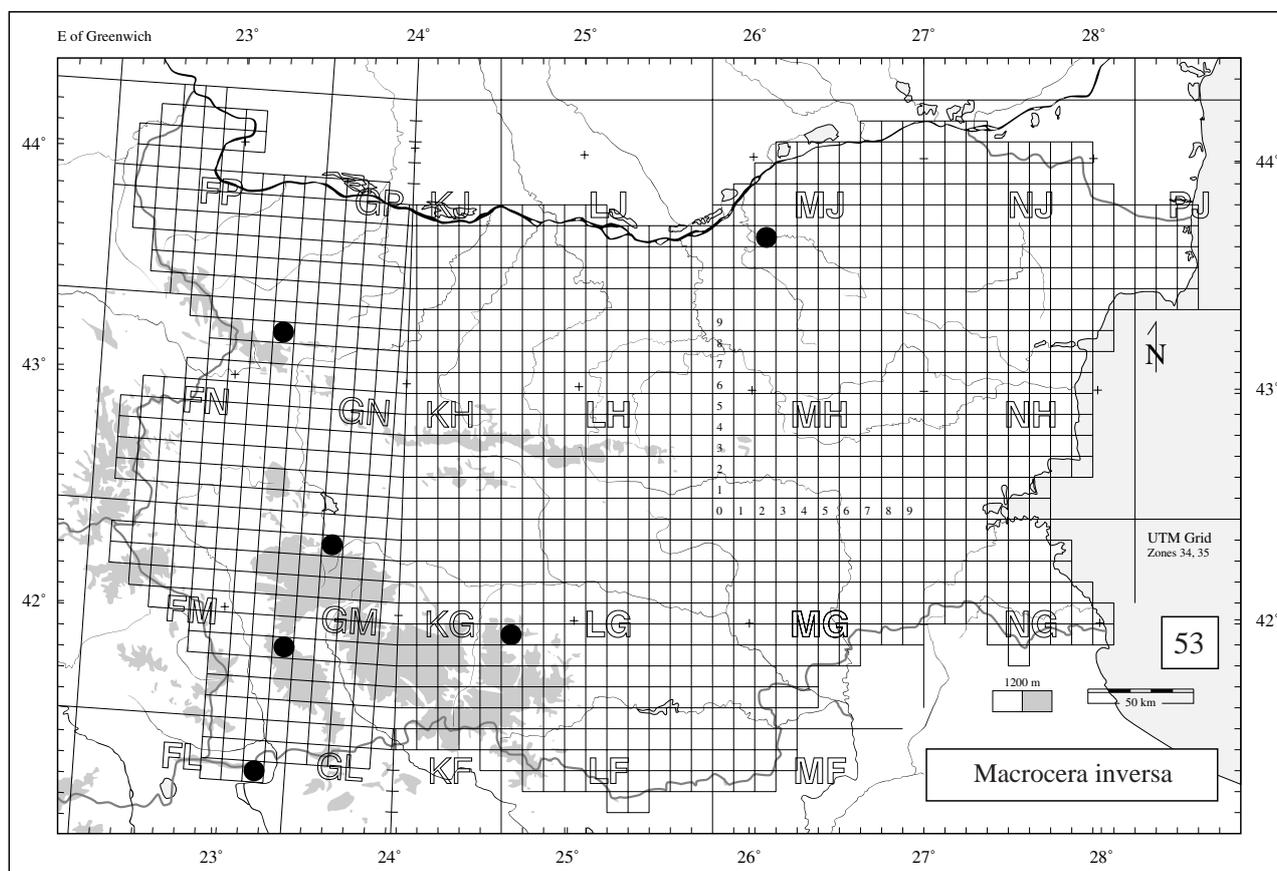
Macrocera inversa Loew, 1869
(Map 53)

Bechev, 1986b: 56 (1); 1997: 11; 2000: 57; 2002a: 86; 2004a: 736 (2); 2004b: 135 (3); 2006b: 703 (4).

Localities: DEP: MJ23: Cherven, 13.05.1996, 2♂ (3). SBW: FN88: Byalata voda, 10.07.1982, 1♂ (1). ROB: FL87: Belasitsa, 24.06.1992, 2♂, 1♀ (3). RPR: GM18: Borovets, 17.07.1985, 1♂ (3). RPP: FM93: Yavorov, 20.07.1985, 1♂ (3). RRW: LG04: Zdravets, 10.06.2000, 1♂ (4). RRE: LG62: Chernoochene, 14.05.1991, 1♂ (2).

Vertical distribution: 150–1740 m; XO, MB, CF.

Seasonal activity: V–VII.



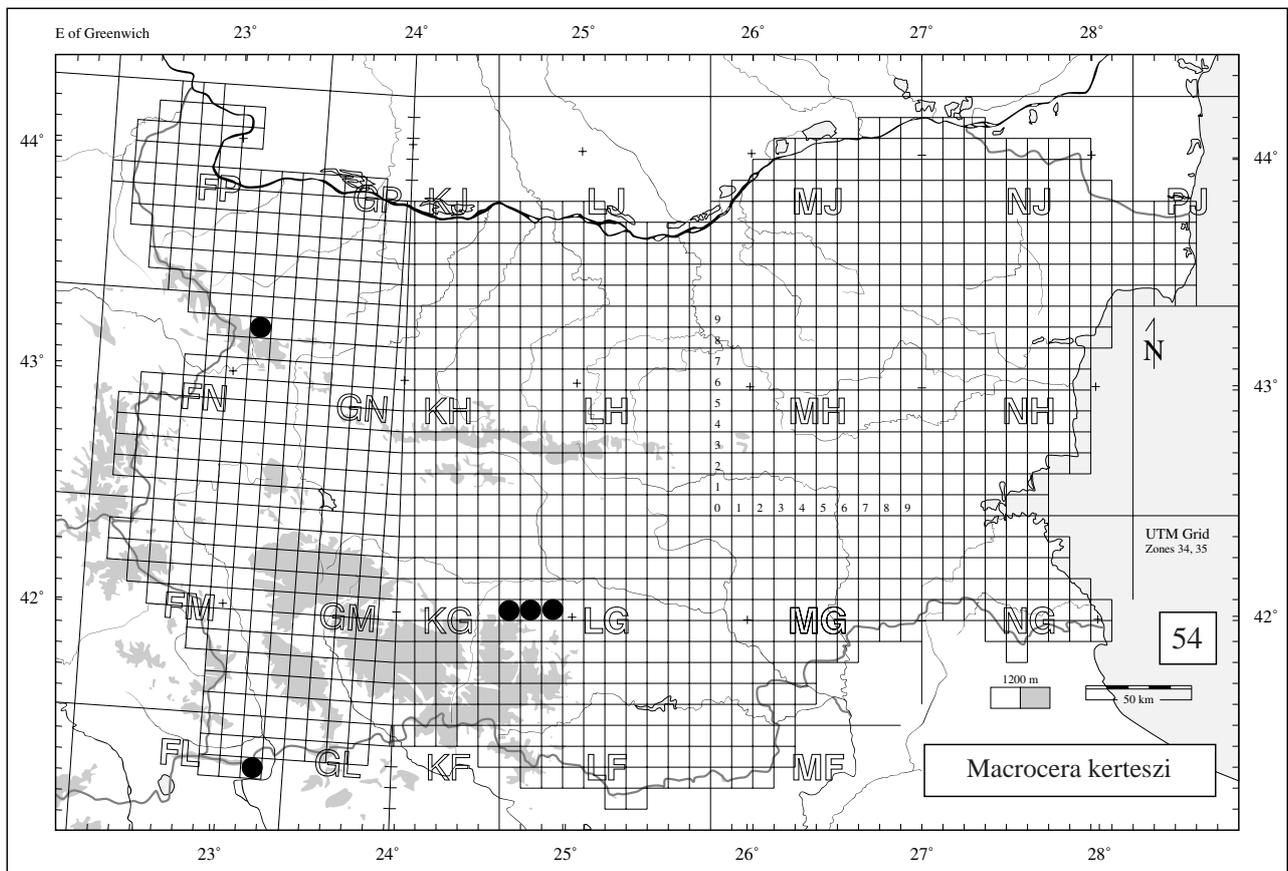
Macrocera kerteszi Lundström, 1911
(Map 54)

Bechev, 1996b: 78 (1); 1997: 11; 2000: 57; 2002a: 86; 2006b: 704 (2).

Localities: SBW: FN78: Barziya, 26.06.1984, 1♂ (1). ROB: FL87: Belasitsa, 23.06.1992, 3♂ (1); 24.06.1992, 1♂. RRW: LG05: Hrabrino, 6.06.1991, 1♂ (1, 2); LG15: Kuklen, 20.06.1997, 1♂ (2); LG25: Asenovgrad, 18.06.1992, 1♂ (1, 2).

Vertical distribution: 350–720 m; XO, MOH.

Seasonal activity: VI.



Macrocera lutea Meigen, 1804

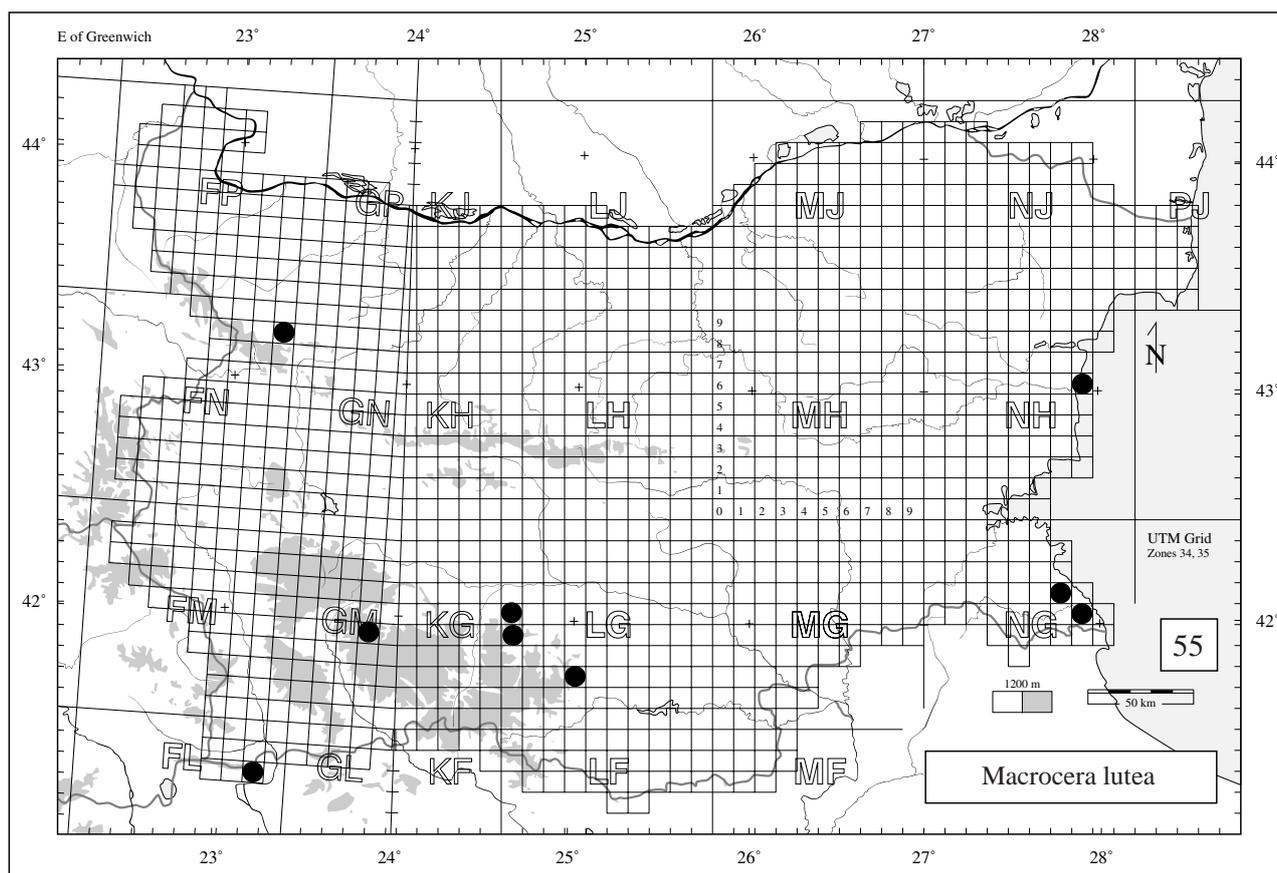
(Map 55)

Bechev, 1986b: 56 (1); 1997: 11; 2000: 57; 2002a: 87; 2004a: 736 (2); 2004b: 135 (3); 2006b: 704 (4).

Localities: SPW: GN37: Karash, 9.07.1988, 2♂ (3). SBW: FN88: Byalata voda, 26.06.1982, 1♂ (1); 30.05.1985, 2♂; Varshets, 9.06.1984, 1♂ (1). PBS: NG66: Silkosia, 29.05.1987, 1♂ (3). ROB: FL87: Belasitsa, 24.06.1992, 1♂ (3). RRW: GM34: Krastava, 2.08.1992, 1♂ (4); LG04: Sitovo, 27.08.1998, 2♂ (4); Zdravets, 26.06.1999, 5♂ (4); LG05: Izvor, 27.05.2000, 1♂ (4); Boykovo, 10.06.2000, 1♂ (4); LG32: Kormisosh, 11.07.1991, 1♂ (4). RRE: LG61: Kardzhali, 14.05.1991, 1♂ (2). BN: NH76: Shkorpilovtsi, 8.06.1990, 1♂ (3). BS: NG75: Sinemorets, 2.06.1990, 1♂ (3).

Vertical distribution: 10–1500 m; XO, MOH, MB, CF.

Seasonal activity: V–VIII.



Macrocera nigricoxa Winnertz, 1863

(Map 56)

M. tusca Loew: Bechev, 1989a: 154 (1). *M. nigricoxa* Winnertz: Bechev, 1992a: 317 (2); 1997: 11; 2000: 58; 2002a: 87; 2006b: 704 (3).

Localities: SBW: GN08: Vratsa, 30.05.1985, 1♂ (1, 2). RRW: LG32: Kormisosh, 11.07.1991, 1♂ (3).

Vertical distribution: 350–900 m; XO, MB.

Seasonal activity: V, VII.

Macrocera parva Lundström, 1914

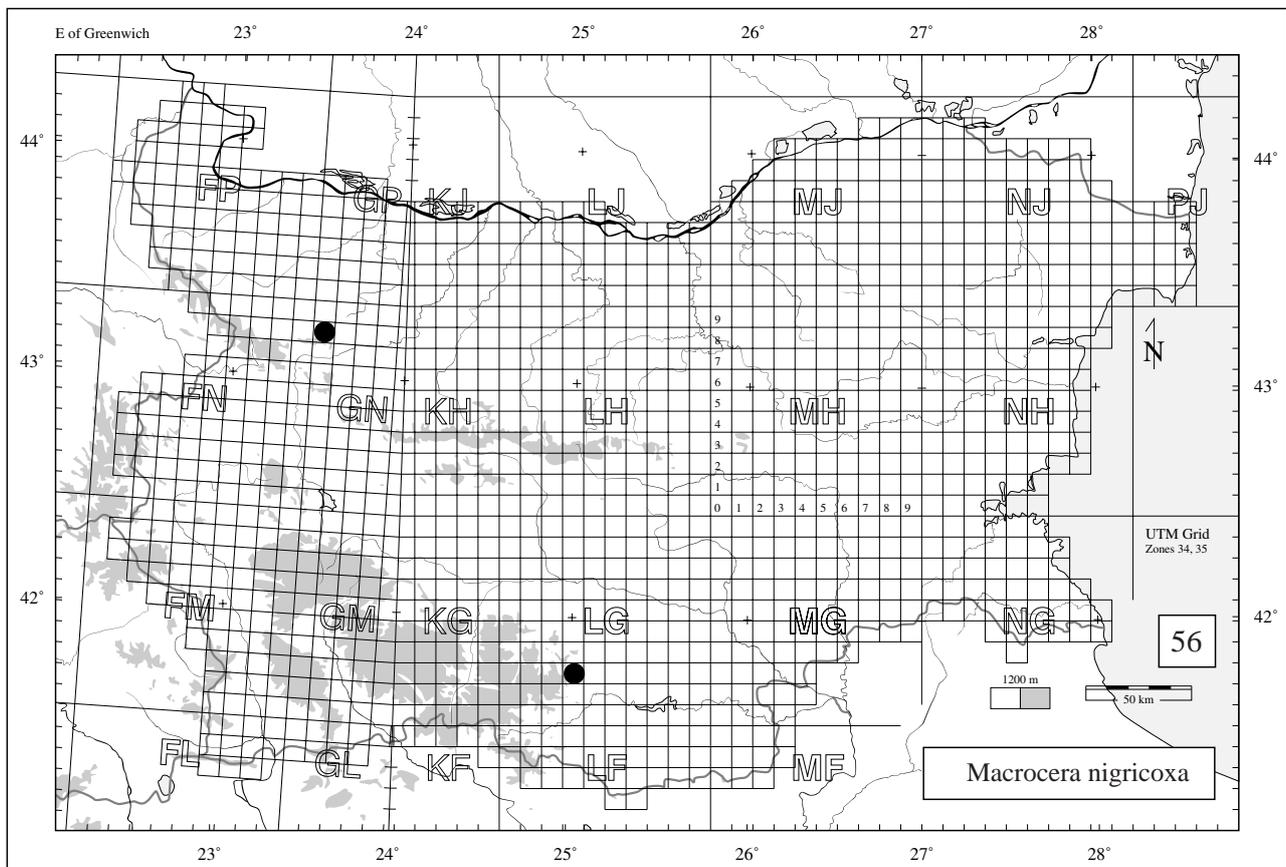
(Map 57)

Bechev, 1996a: 19 (1); 1997: 11; 2000: 58; 2002a: 87; 2004b: 135 (2).

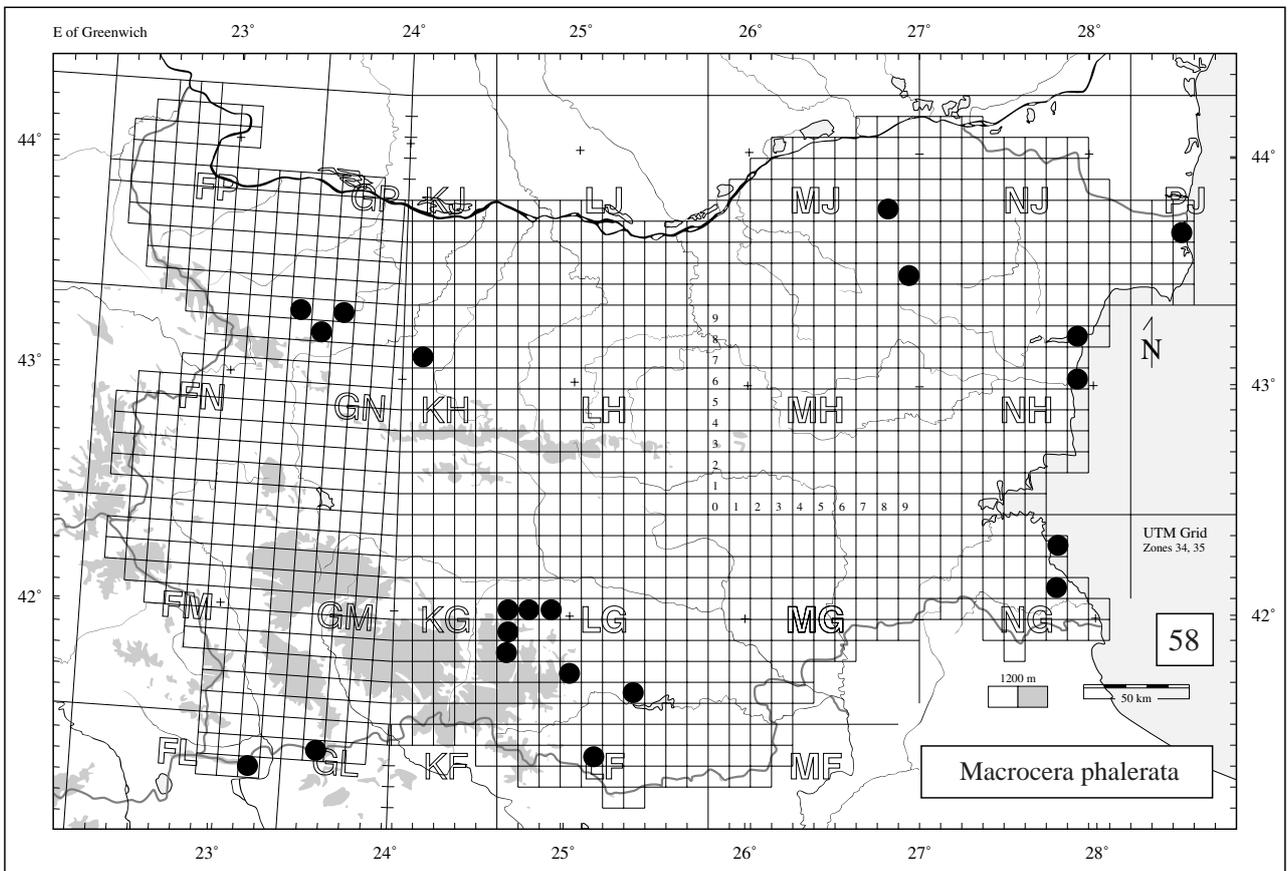
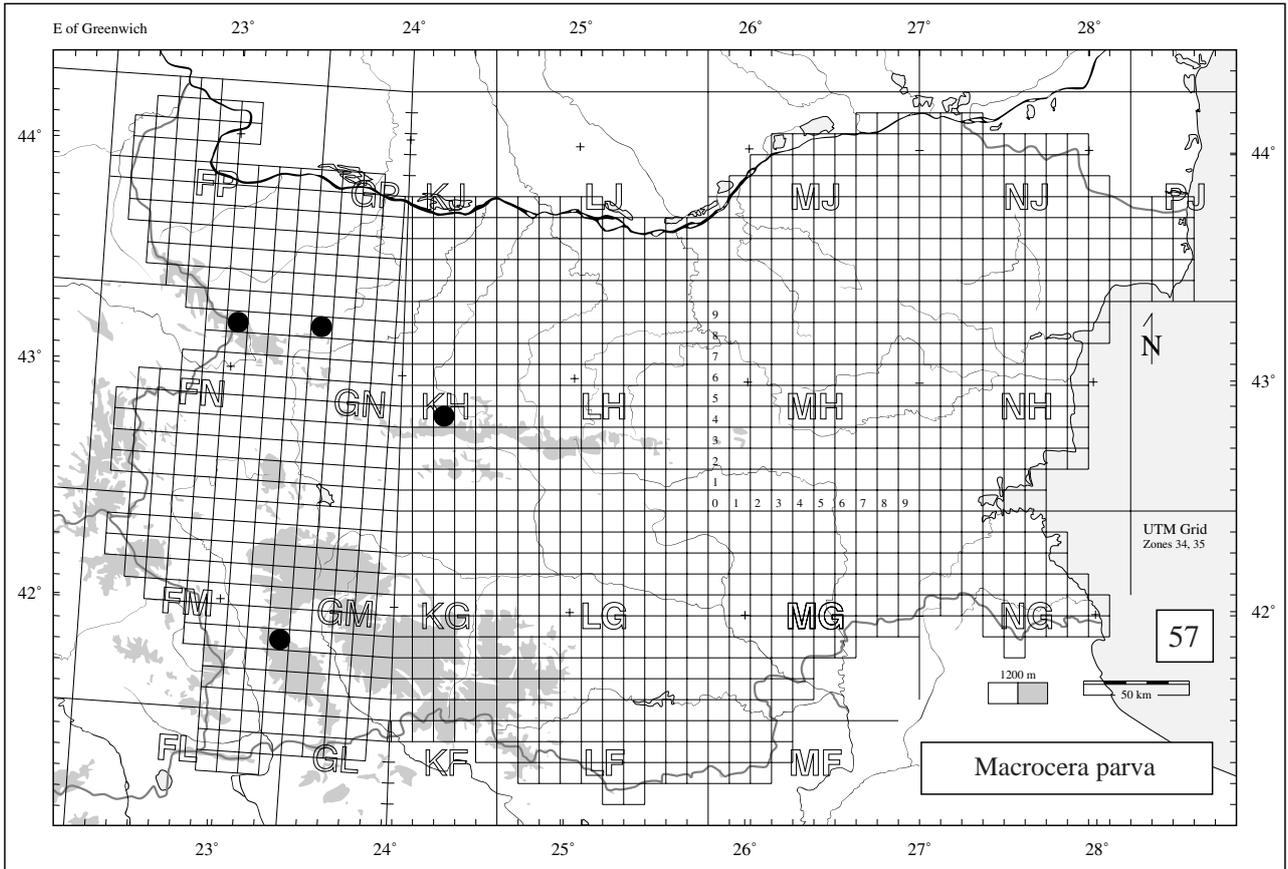
Localities: SBW: FN68: Kom (N of), 8.07.1982, 6♂, 1♀ (2); 20.08.1983, 1♂, 1♀ (2); GN08: Zgorigrad, 4.07.1983, 2♂ (1). SBM: KH74: Boatin, 6.06.1982, 2♂, 1♀ (2). RPP: FM93: Yavorov, 20.07.1985, 1♂ (2).

Vertical distribution: 600–1740 m; MB, CF.

Seasonal activity: VI–VIII.



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Macrocera phalerata Meigen, 1818

(Map 58)

Bechev, 1986b: 57 (1); 1997: 11; 2000: 58; 2002a: 87; 2004a: 736 (2); 2004b: 135 (3); 2006b: 704 (4).

Localities: DEL: MJ84: Isperih, 20.05.1990, 1♂, 1♀ (3). DEP: MJ91: Bliznatsi, 28.05.1990, 1♂ (3). SPW: GN19: Veslets, 4.06.1982, 1♂ (1). SPM: KH67: Zlatna Panega, 14.06.1990, 1♂ (3). SBW: FN99: Matnitsa, 25.08.1981, 5♂ (1); 4.09.1984, 1♂ (1); GN08: Vratsa, 5.08.1981, 1♂ (3); Parshevitsa, 17.07.1984, 1♀ (3). PBS: NG66: Silkosia, 11.06.1990, 1♂ (3). ROB: FL87: Belasitsa, 24.06.1992, 2♂ (3). RPS: GL18: Goleshovo, 5.06.1988, 2♂ (3). RRW: LG02: Zabardo, 12.08.1996, 1♂ (4); LG03: Chudnite mostove, 18.08.1999, 1♂ (4); LG04: Lilkovo, 1.09.1989, 3♂, 1♀ (4); LG05: Hrabrino, 1.09.1989, 1♂(4); 6.06.1991, 1♂ (4); 21.05.2000, 1♂ (4); Izvor, 27.05.2000, 2♂ (4); Boykovo, 15.08.2000, 2♂ (4); LG15: Kuklen, 20.05.2000, 1♂ (4); Galabovo, 20.05.2000, 1♂ (4); LG25: Asenovgrad, 19.06.1992, 6♂ (4); LG32: Kormisosh, 11.07.1991, 1♀ (4). RRE: LF48: Zlatograd, 25.09.1993, 1♀; LG61: Kardzhali, 14.05.1991, 1♂ (2).

BN: NH76: Kamchia, 8.06.1990, 4♂ (3); NH78: Varna, 9.06.1990, 1♂ (3); PJ23: Durankulak, 7.07.1985, 1♂ (3). BS: NG66: Tsarevo, 17.06.1991, 1♂ (3); NG68: Velika, 6.07.1996, 1♂ (3).

Vertical distribution: 5–1450 m; XO, MOH, MB, CF.

Seasonal activity: V–IX.

Macrocera pilosa Landrock, 1917

(Map 59)

Bechev, 1991a: 27 (1); 1997: 11; 2000: 58; 2002a: 87.

Localities: SBW: GN08: Ledenika, 4.05.1986, 3♂ (1).

Vertical distribution: 800 m; MB.

Seasonal activity: V.

Macrocera stigma Curtis, 1837

(Map 60)

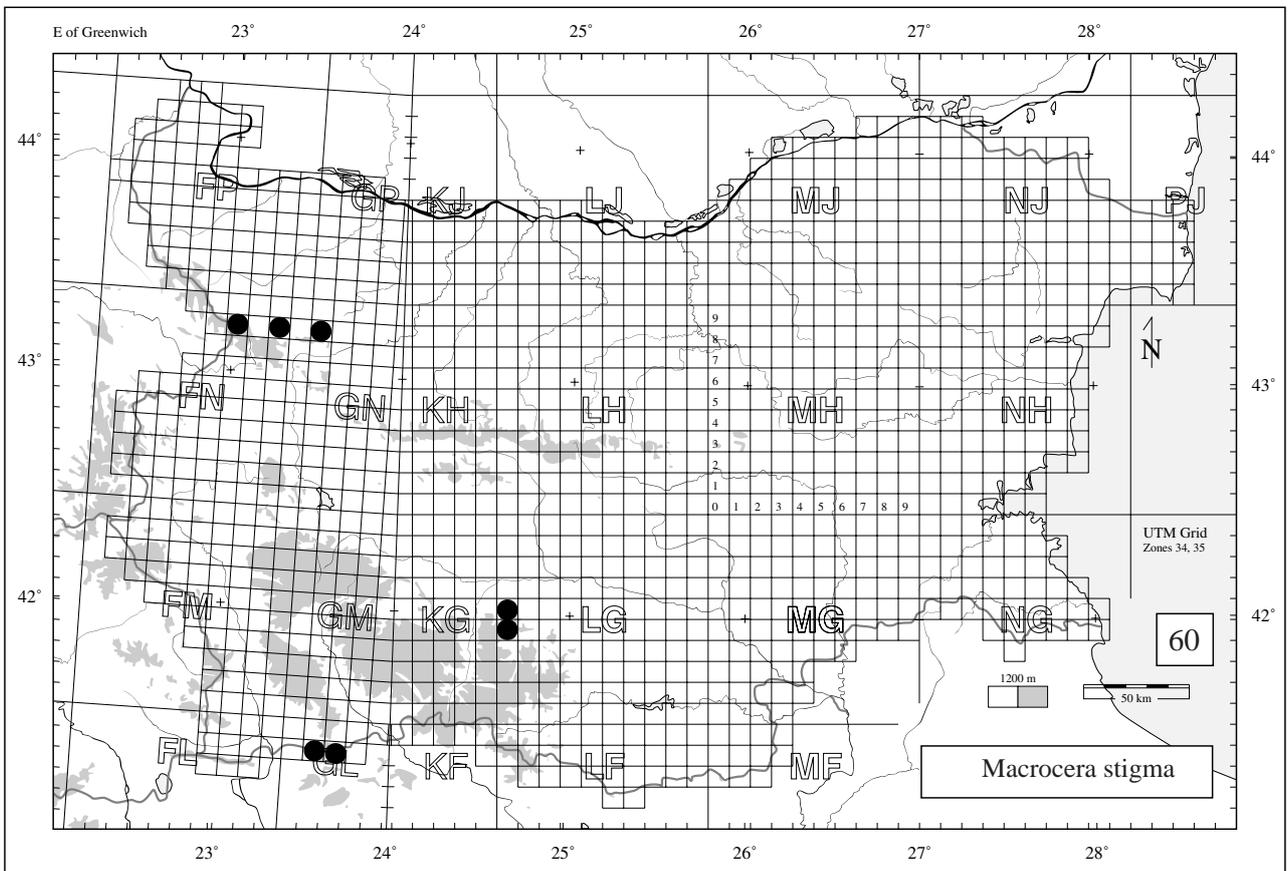
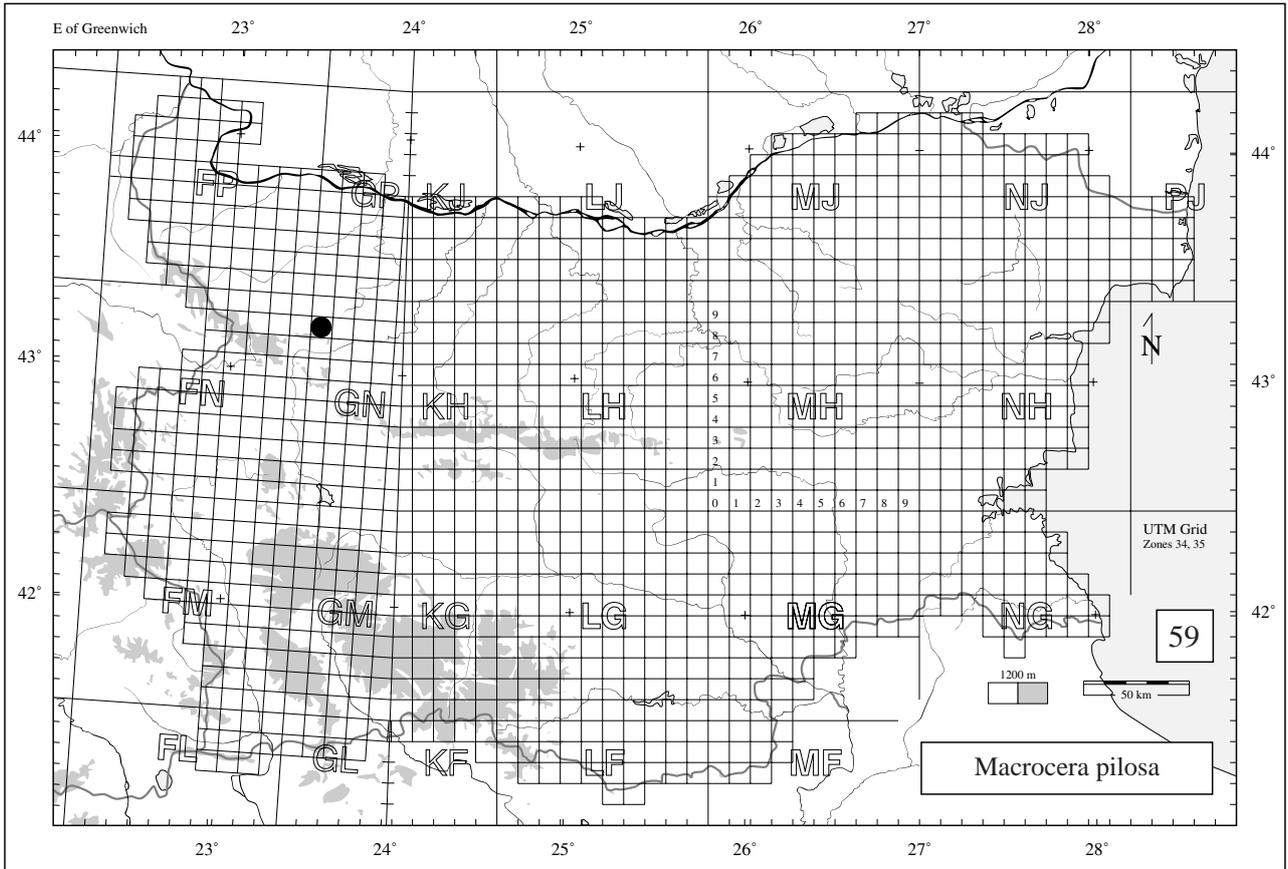
Bechev, 1986b: 57 (1); 1997: 11; 2000: 58; 2002a: 87; 2004b: 135 (2); 2006b: 704 (3).

Localities: SBW: FN68: Kom (N of), 20.08.1982, 2♂, 1♀ (1); FN88: Byalata voda, 26.06.1982, 2♂ (1); 10.06.1984, 5♂, 1♀ (1); Varshets, 10.06.1984, 1♂ (1); GN08: Ledenika, 22.05.1982, 1♂ (1); Parshevitsa, 8.06.1984, 1♂, 3♀ (1). RPS: GL18: Goleshovo, 5.06.1988, 2♂ (2); GL28: Hambar dere, 3.06.1988, 1♂ (2). RRW: LG04: Zdravets, 26.06.1999, 2♂ (3); LG05: Boykovo, 15.08.2000, 3♂ (3).

Vertical distribution: 600–1700 m; MB, CF.

Seasonal activity: V, VI, VIII.

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Macrocera stigmoides Edwards, 1925

(Map 61)

Bechev, 1996a: 19 (1); 1997: 11; 2000: 58; 2002a: 87; 2004a: 736 (2); 2004b: 135 (3); 2006b: 704 (4).

Localities: SPW: GN37: Karash, 9.07.1988, 4♂, 1♀ (1). RPR: GM18: Borovets, 17.07.1989, 1♂ (3). RPP: FM93: Yavorov, 20.07.1985, 1♂ (3); GM03: Banderitsa, 19.08.1997, 5♂ (3). RRW: KG53: Golyam Beglik, 31.07.1988 (4); LG03: Persenk, 7.08.1996, 1♂ (4); LG04: Zdravets, 26.06.1999, 1♂ (4); LG15: Galabovo, 20.05.2000, 1♂ (4); LG32: Zagrazhden, 8.06.1990, 1♂ (4). RRE: LG62: Chernoochene, 14.05.1991, 1♂ (2); MF19: Plevun, 6.05.1999, 4♂ (2); MF29: Ivaylovgrad, 15.05.1991, 1♂ (2). BS: NG66: Tsarevo, 20.06.1989, 1♂ (3); 11.06.1992, 1♂ (3); NG68: Velika, 6.07.1996, 1♂ (3).

Vertical distribution: 5–2000 m; XO, MOH, MB, CF.

Macrocera vittata Meigen, 1830

(Map 62)

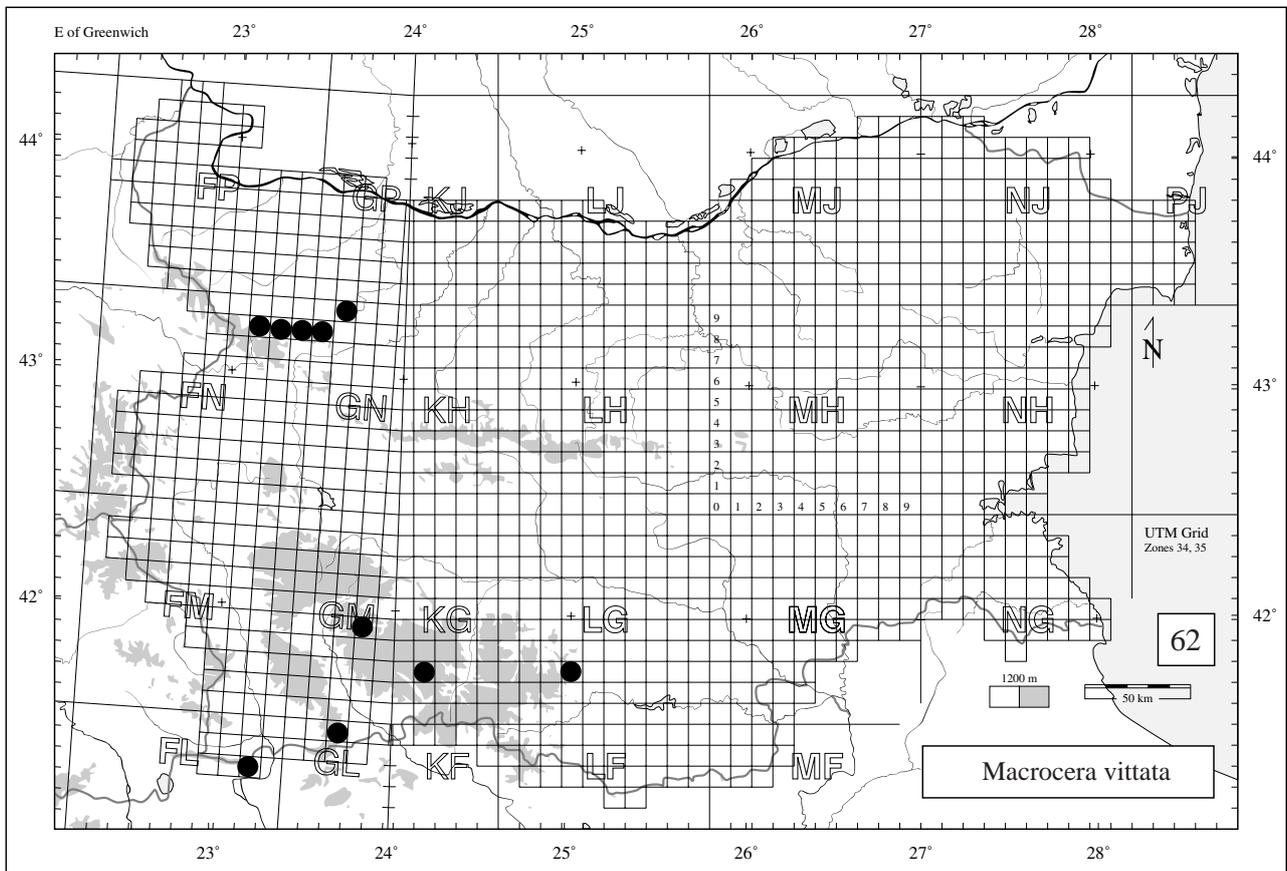
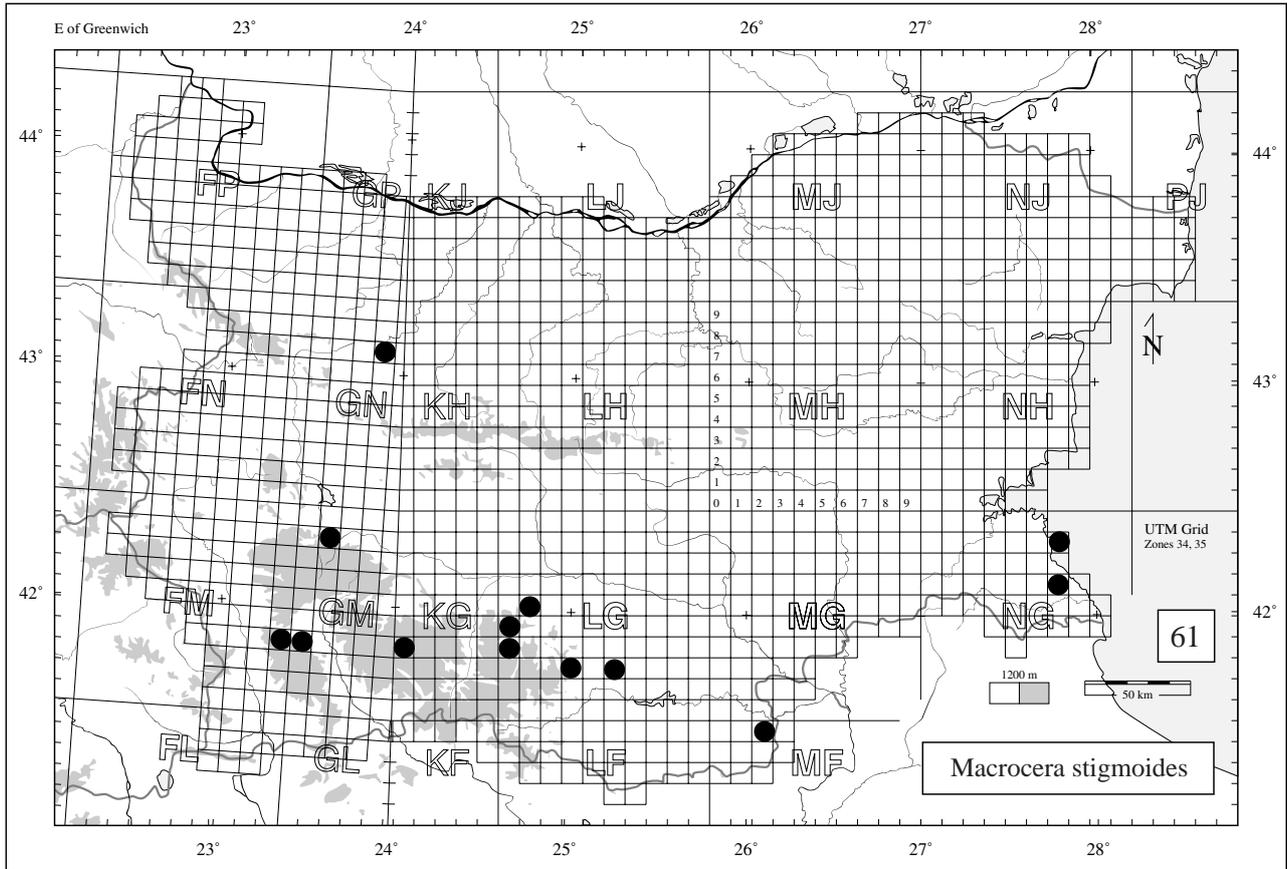
Bechev, 1985a: 37 (1); 1997: 11; 2000: 58; 2002a: 87; 2004b: 135 (2); 2006b: 704 (3).

Localities: SPW: GN19: Veslets, 31.05.1985, 1♂ (2). SBW: FN78: Berkovitsa (above of), 25.08.1981, 1♂ (1); FN88: Byalata voda, 26.06.1982, 4♂ (1); 10.07.1982, 1♂ (2); 10.06.1984, 1♂ (2); Varshets, 9.06.1984, 2♂ (2); FN98: Druzhevo, 23.08.1981, 1♂ (1); GN08: Zgorigrad, 4.07.1983, 2♂ (2). ROB: FL87: Belasitsa, 24.06.1992, 1♂ (2). RPS: GL29: Paril, 3.06.1988, 1♂ (2). RRW: GM34: Krastava, 2.08.1992, 1♂ (3); KG62: Shiroka polyana, 8.08.2000, 2♂ (3); LG32: Zagrazhden, 10.06.1991, 1♂ (3).

Vertical distribution: 550–1700 m; XO, MOH, MB, CF.

Seasonal activity: V–VIII.

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REFERENCES

- ABADJIEV, S., 2001. An Atlas of the Distribution of the Buterflies in Bulgaria (Lepidoptera: Hesperioidea & Papilionoidea). Pensoft Publishers, Sofia-Moskow, 335 pp.
- BECHEV, D., 1985a. The species of Superfamily *Mycetophiloidea* (Diptera) Distributed in Bulgaria. – Acta zool. bulg., **27**: 36-40. [in Bulgarian]
- BECHEV, D., 1985b. *Acnemia vrazzatica* n. sp. from Bulgaria (Diptera, Mycetophilidae). – Reichenbachia Mus. Tierk. Dresden, **23**, Nr. 8: 35-36.
- BECHEV, D., 1986a. New species from Superfamily *Mycetophiloidea* (Diptera) for Bulgaria Fauna. – Acta zool. bulg., **30**: 72-74. [in Bulgarian]
- BECHEV, D., 1986b. New species from the Superfamily *Mycetophiloidea* (Diptera) for Bulgaria Fauna. II. – Acta zool. bulg., **32**: 56-59. [in Bulgarian]
- BECHEV, D., 1986c. *Sciophila rufa* Meigen (Diptera, Mycetophilidae) as a Host for *Orthocentrus stigmaticus* Holmgren (Hymenoptera, Ichneumonidae). – Acta zool. bulg., **32**: 60-61. [in Bulgarian]
- BECHEV, D., 1988a. Two New Species of Mycetophilidae from Bulgaria (Insecta, Diptera). – Reichenbachia Mus. Tierk. Dresden, **25**, Nr. 38: 185-186.
- BECHEV, D., 1988b. *Sciophila zaitzevi* n. sp. from Bulgaria (Insecta, Diptera, Mycetophilidae). – Reichenbachia Mus. Tierk. Dresden, **25**, Nr. 39: 187-188.
- BECHEV, D., 1989a. New species *Mycetophiloidea* (Diptera) for Bulgarian fauna. III. – Trav. Sci. Univ. Plovdiv, Biologie, **27**, 6: 153-159. [in Bulgarian]
- BECHEV, D., 1989b. Larvae of *Mycetophiloidea* (Diptera) established in fungi in Bulgaria. – Trav. Sci. Univ. Plovdiv, Biologie, **27**, 6: 161-163. [in Bulgarian]
- BECHEV, D., 1989c. *Monocentrota matilei* n. sp. from Bulgaria and Algeria (Insecta, Diptera: Keroplatidae). – Reichenbachia Mus. Tierk. Dresden, **26**, Nr. 30: 173-174.
- BECHEV, D., 1990a. New species *Mycetophiloidea* (Diptera) to the Bulgarian fauna. IV. – Trav. Sci. Univ. Plovdiv, Biologie, **28**, 6: 85-88. [in Bulgarian]
- BECHEV, D., 1990b. Recent Holarctic species of the genus *Anaclileia* Meunier (Insecta, Diptera: Mycetophilidae). – Reichenbachia Mus. Tierk. Dresden, **28**, Nr. 13: 67-71.
- BECHEV, D., 1990c. Review of the Holarctic Species of Genus *Polylepta* Winnertz (Insecta, Diptera: Mycetophilidae). – Ent. Abh. Staat. Mus. Tierk. Dresden, **53**, 12: 179-184.
- BECHEV, D., 1991a. New species *Mycetophiloidea* (Diptera) to the Bulgarian fauna. V. – Trav. Sci. Univ. Plovdiv, Biologie, **29**, 6: 27-30. [in Bulgarian]
- BECHEV, D., 1991b. *Macrocera gemagea* sp. n. from Bulgaria (Insecta, Diptera: Mycetophiloidea). – Reichenbachia Mus. Tierk. Dresden, **28**, Nr. 35: 185-186.
- BECHEV, D., 1992a. On the type specimens of *Macrocera nigricoxa* Winnertz 1863 and *Macrorrhyncha exempla* (Plassmann 1978) (Insecta: Diptera:

- Mycetophiloidea). – *Senckenbergiana biol.*, **72** (4/6): 317-320.
- BECHEV, D., 1992b. A new species of Genus *Macrorrhyncha* (Diptera: Keroplatidae) from Bulgaria. – *Acta zool. bulg.*, **45**: 61-62.
- BECHEV, D., 1994. New species *Mycetophiloidea* (Diptera) to the fauna of Bulgaria. VI. – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **30**, 6: 25-28.
- BECHEV, D., 1995. The Palaearctic species of the genus *Sceptonia* Winnertz (Diptera: Mycetophilidae). – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **31**, 6: 7-21.
- BECHEV, D., 1996a. New species of fungus gnats (Diptera: *Sciaroidea*, excluding *Sciaridae*) to the fauna of Bulgaria. VII. – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **32**, 6: 19-21.
- BECHEV, D., 1996b. *Macrocera kerteszi* Lundström – a little known species (Diptera: Keroplatidae: Macrocerinae). – *Folia ent. hung.*, **57**: 77-78.
- BECHEV, D., 1997. Check-list of the fungus gnats (Diptera: *Sciaroidea*, excluding *Sciaridae*) of the Balkan Peninsula. – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **33**, 6: 9-22.
- BECHEV, D. 1998. The species of *Allodia* Winnertz on the Balkan Peninsula (Diptera, Mycetophilidae). – *Acta zool. bulg.*, **50** (1): 61-63.
- BECHEV, D., 1999a. Biotic connections of fungus gnats (Diptera: *Sciaroidea*, excluding *Sciaridae*) in forest habitats of mount Pirin – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **35**, 6: 37-40. [in Bulgarian]
- BECHEV, D., 1999b. Species of the Genus *Phronia* Winnertz in Bulgaria (Diptera, Mycetophilidae). – *Acta zool. bulg.*, **51** (2/3): 39-42.
- BECHEV, D., 2000. Seasonal activity and vertical distribution of fungus gnats (Diptera: *Sciaroidea*, excluding *Sciaridae*) in Western and Central parts of Stara Planina Ridge (Bulgaria). – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **36**, 6: 51-66.
- BECHEV, D., 2001. New species of fungus gnats (Diptera: *Sciaroidea*, excluding *Sciaridae*) to the fauna of Bulgaria. VIII – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **37**, 6: 5-8.
- BECHEV, D., 2002a. Check list of the fungus gnats of the families *Bolitophilidae*, *Diadocidiidae*, *Ditomyiidae*, *Keroplatidae* and *Mycetophilidae* in Bulgaria (Diptera: Nematicera) – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **38**, 6: 81-112.
- BECHEV, D., 2002b. *Orfelia gruevi* spec. nov. from Bulgaria (Diptera: *Sciaroidea*: Keroplatidae) – *Acta entomologica slovenica*, **10**, 2: 199-201.
- BECHEV, D., 2003. Corrections and additions to the check list of the fungus gnats in Bulgaria (Diptera: *Sciaroidea*) – *Trav. Sci. Univ. Plovdiv, Biologie, Animalia*, **39**, 6: 97-99.
- BECHEV, D., 2004a. Fungus Gnats (Diptera: *Bolitophilidae*, *Diadocidiidae*, *Ditomyiidae*, *Keroplatidae*, *Mycetophilidae*) of the Eastern Rhodopes (Bulgaria). – In: Beron P., Popov A. (eds). *Biodiversity of Bulgaria*. 2.

- Biodiversity of Eastern Rhodopes (Bulgaria and Greece). Pensoft & Nat. Mus. Natur. Histn, Sofia, 735-739.
- BECHEV, D., 2004b. New distributional data about the fungus gnats of the families Bolitophilidae, Diadocidiidae, Ditomyiidae and Keroplatidae in Bulgaria (Diptera: Nematocera: Sciaroidea) – Trav. Sci. Univ. Plovdiv, Biologie, Animalia, **40**, 6: 129-136.
- BECHEV, D. 2006a. New data about Keroplatidae (Diptera: Sciaroidea) in Bulgaria. – Historia naturalis bulgarica, **17**: 93-94.
- BECHEV, D., 2006b. Fungus Gnats (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Mycetophilidae) of the Western Rhodopes (Bulgaria). – In: Beron P. (ed). Biodiversity of Bulgaria. 3. Biodiversity of Western Rhodopes (Bulgaria and Greece) I. Pensoft & Nat. Mus. Natur. Hist., Sofia, 701-710.
- BURGHELE-BALACESCO, A., 1966. Dipteres cavernicoles recueillies en Bulgarie. – Int. J. Speleol., **2**: 303-308.
- CHANDLER, P., 1994. The fungus gnats of Israel (Diptera: *Sciaroidea*, excluding Sciaridae). – Israel Journal of Entomology, **28**: 1-100.
- CHANDLER, P., J. BLASCO-ZUMETA, 2001. The fungus gnats (Diptera, *Bolitophilidae*, *Keroplatidae* and *Mycetophilidae*) of the Monegros region (Zaragoza, Spain) and five other new european species of *Pyratula* Edwards and *Sciophila* Meigen. – Zapateri, Revta. aragon ent., **9**: 1-24.
- COHER, E., 1995. A contribution to a revision of the genus *Azana* Walker, 1856 (Insecta: Diptera: Mycetophilidae: Sciophilinae). – Reichenbachia Mus. Tierk. Dresden, **31**, Nr. 17: 83-91.
- HAZELTON, M., 1970. Fauna from some caves in Bulgaria & one in Yugoslavia. – The Trans. Cave Res. Group of Gr. Britain, **12** (1): 33-37.
- HUBENOV, Z., 1997. Possibilities for Using of a System from the Really Defined Natural Territories for the Faunistic Researches in Bulgaria. – Acta zoologica bulgarica, **49**: 5-9.
- IOAKIMOV, D., 1899. Contribution to the insect fauna of Mt. Rila. – Perioditshno spisanie na Balgarskoto knizovno druzhestvo, Sofia [Periodical magazine of Bulgarian Literary Society, Sofia], **60**: 858-884. [in Bilgarian]
- KOLAROV, J., D. BECHEV., 1995. Hymenopterenparasiten (Hymenoptera) auf Pilzmücken (Mycetophiloidea, Diptera). – Acta ent. bulgarica, **2**: 18-20.
- KURINA, O., 2003. Notes on the Palaerctic species of the genus *Polylepta* Winnertz (Diptera: Mycetophilidae) with a new synonymization. – Entomologica Fennica, **14**: 91-97.
- NEDELKOV, N., 1912. Sixth contribution to the entomological fauna of Bulgaria. – Spisanie na Balgarskata Akademiya na Naukite [Magazine of Bulgarian Academy of Sciences], **2**: 177-218. [in Bilgarian]
- PLASSMANN, E., 1978. Neue Pilzmücken aus Schveden und Bulgarien. –

Senckenbergiana biol., **59**: 205-214.

VÄISÄNEN, R., 1984. A monograph of the genus *Mycomya* Rondani in the Holarctic region. – Acta Zoologica Fennica, **177**: 1-346.

VELCHEV, V., S. GANCHEV, I. BONDEV, 1982. Plant belts. – In: Galabov et al. (eds.). Geography of Bulgaria. Physical geography., BAN, Sofia, 439-443 [in Bulgarian].

**ГЪБНИ КОМАРИ ОТ СЕМЕЙСТВА VOLITOPHILIDAE,
DIADOCIDIIDAE, DITOMYIIDAE И KEROPLATIDAE
(DIPTERA: SCIAROIDEA) В БЪЛГАРИЯ**

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(резюме)

Настоящата работа обобщава всички известни находища, фаунистични данни и карти на разпространението на 62 вида гъбни комари от сем. Volitophilidae, Diadocidiidae, Ditomyiidae и Keroplatidae в България до 2006 г. включително. Данните са допълнени и с нови находища.

