

# The Fungus Gnats (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae) of Greece, its islands and Cyprus

[Die Pilzmücken (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae und Mycetophilidae) Griechenlands und seiner Inseln sowie Zyperns]

by

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## Abstract

The species of fungus gnats (Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae) occurring in Greece and Cyprus are reviewed. Altogether 201 species are recorded, 189 for Greece and 69 for Cyprus. Of these 126 species are newly recorded for Greece and 36 are newly recorded for Cyprus. The following new taxa are described from Greece: *Macrorrhyncha ibis* spec. nov., *M. pelargos* spec. nov., *M. laconica* spec. nov., *Macrocera critica* spec. nov., *Docosia cephaloniae* spec. nov., *D. enos* spec. nov., *D. pasiphae* spec. nov., *Megophthalmidia illyrica* spec. nov., *M. ionica* spec. nov., *M. pytho* spec. nov., *Mycomya thrakis* spec. nov., *Allocotocera scheria* spec. nov., *Sciophila pandora* spec. nov., *Rymosia labyrinthos* spec. nov.; *M. illyrica* is also recorded from Croatia. The following new taxa are described from Cyprus: *Macrocera cypriaca* spec. nov., *Megophthalmidia alnicola* spec. nov., *M. cedricola* spec. nov. The following new synonymies are proposed: *Mycomya tenuis* (WALKER, 1856) = *M. intermissa* PLASSMANN, 1984 syn. nov., *Phronia willistoni* DZIEDZICKI, 1889 = *P. incisa* CASPERS, 1991 syn. nov. A key is provided for the western Palaearctic species of *Macrorrhyncha* WINNERTZ. The composition of the fauna of these families in Greece and Cyprus is discussed in relation to the Mediterranean and to the wider distribution of genera and species.

## Key words

Diptera, Sciaroidea, Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Mycetophilidae, faunistics, taxonomy, new species, key to *Macrorrhyncha* species, Greece, Cyprus

## Zusammenfassung

Vorliegende Publikation hat die in Griechenland und Zypern vorkommenden Pilzmücken (Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae und Mycetophilidae) zum Gegenstand. Insgesamt werden 201 Arten gemeldet, 189 aus Griechenland und 69 aus Zypern. Von diesen werden 126 erstmals für die Fauna Griechenlands und 36 erstmals für die zyprische Fauna registriert. Folgende neue Arten werden aus Griechenland beschrieben: *Macrorrhyncha ibis* spec. nov., *M. pelargos* spec. nov., *M. laconica* spec. nov., *Macrocera critica* spec. nov., *Docosia cephaloniae* spec. nov., *D. enos* spec. nov., *D. pasiphae* spec. nov., *Megophthalmidia illyrica* spec. nov., *M. ionica* spec. nov., *M. pytho* spec. nov., *Mycomya thrakis* spec. nov., *Allocotocera scheria* spec. nov., *Sciophila pandora* spec. nov., *Rymosia labyrinthos* spec. nov.; *M. illyrica* wird auch aus Kroatien gemeldet. Folgende Arten werden aus Zypern beschrieben: *Macrocera cypriaca* spec. nov., *Megophthalmidia alnicola* spec. nov., *M. cedricola* spec. nov. Die nachfolgenden neuen Synonyme ergaben sich aus der Bearbeitung des Materials: *Mycomya tenuis* (WALKER, 1856) = *M. intermissa* PLASSMANN, 1984 syn. nov., *Phronia willistoni* DZIEDZICKI, 1889 = *P. incisa* CASPERS, 1991 syn. nov. Es wurde ein Bestimmungsschlüssel der westpaläarktischen Arten der Gattung *Macrorrhyncha* WINNERTZ erarbeitet. Die Zusammensetzung der Fauna dieser Familien in Griechenland und Zypern wird im Vergleich zu jener in der Mediterraneis diskutiert und erweitert die Informationen zum Vorkommen der Gattungen und Arten.

## Stichwörter

Diptera, Sciaroidea, Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Mycetophilidae, Faunistik, Taxonomie, neue Arten, Bestimmungsschlüssel von *Macrorrhyncha*, Griechenland, Zypern

## Introduction

Knowledge of the fungus gnat fauna of the Mediterranean subregion of the Palaearctic has been increasing in recent years with the appearance of national checklists for Italy (MINELLI *et al.* 1995) and the Iberian peninsula (CARLES-TOLRÁ 2002), which have included the associated islands. Accounts of the species found in Israel (CHANDLER 1994) and Malta (CHANDLER & GATT 2000) have also appeared. At the same time checklists for this group have been provided for the Balkans (BECHEV 1997c including 338 species, of which 275 were listed for Bulgaria) and updated lists for Bulgaria (BECHEV 2002a and 2003; bringing the total for Bulgaria to 308 species and the Balkans to 356). BECHEV (1997c) included a list of 27 species for the mainland of Greece, based on previous publications. Many of the additions reported here were included in the Fauna Europaea database compiled by the first author (CHANDLER 2004) with an indication that they were new records to be published formally later.

Information on the Greek fauna has been sparse in the literature and entirely based on collections made by visiting entomologists from other parts of Europe. The lack of any local collectors means that the coverage is of necessity patchy although collections are now available from several parts of the mainland and from most of the larger islands, so a distribution pattern, at least for the Mediterranean elements of the fauna is beginning to emerge. It is recognised that many further species will be added, especially with more collecting in the northern parts of the Greek mainland, where a similar fauna to Bulgaria can be expected, but it is desirable to bring together here what is known as a basis for further studies. It is also considered appropriate to include records for Cyprus as there have been several recent collections made there and much of the fauna is in common with that of the Greek islands.

Earlier data on fungus gnats of Greece is scattered in several publications (LOEW 1869 and 1871; LUNDSTRÖM 1911 and 1912; MATILE 1969a, 1975 and 1977b; PLASSMANN 1984; VÄISÄNEN 1984a; CASPERS 1991; CHANDLER 1994; CHANDLER & RIBEIRO 1995; BECHEV 1995, 1997a and 1997b; MARTINOVSKÝ 2001; CHANDLER & BLASCO-ZUMETA 2001; CHANDLER 2002; KURINA 2004). These papers together recorded 63 species from Greece. From Cyprus 34 species have been reported (GEORGHIOU 1977; VÄISÄNEN 1984a; CASPERS 1991; CHANDLER 1994; KURINA 2004), most of them without precise data. In the present work the total is brought to 189 species for Greece and 69 species for Cyprus, with an overall total of 201 species. For comparison with Cyprus, the total for Crete is 70 species.

## Material

The material on which this study is based has come from several sources. Most of it has been collected since 1970 but some older material in museum collections has also contributed to the data. The material examined by the authors can be summarised as follows:

- (1) NC examined the large collections obtained from many parts of the Mediterranean region by Dr H. MALICKY in the 1970s and 1980s. This included material from many parts of Greece and its islands, as well as from Cyprus, Turkey and several parts of the western Mediterranean. As described by CASPERS (1991) the primary aim was to obtain Trichoptera mostly by light-trapping but sometimes by sweeping and collecting of non-target groups was incidental, with the fungus gnats in relatively low proportion compared to aquatic groups. Three species from Greece and one from Cyprus were dealt with by CASPERS (1991).
- (2) DB examined collections made in mainland Greece by I. SIVEC and B. HORVAT (SMNH) in 1994 and by himself in the same year and in 1982. BECHEV (1997a and 1997b) described a new species and subspecies from this material.
- (3) PC examined collections made by several British collectors, principally Alan STUBBS (1972 Corfu and adjacent mainland, 1979 mainland Greece and the Peloponnese, 1980 Crete and 1982 Cyprus)

and Ian McLEAN (1980 Corfu, 1981 Cephalonia, 1982 Crete and 1983 Cyprus), with smaller amounts of material obtained on Corfu by John ISMAY, Milos by David HENSHAW, Paxos by Tony IRWIN and the Peloponnese by John KRAMER and David GIBBS. Some records from this material have already been published by CASPERS (1991), BECHEV (1995, 1997b), CHANDLER & BLASCO-ZUMETA (2001) and CHANDLER (2002). CHANDLER (1994) and CHANDLER & RIBEIRO (1995) cited records of some species as from countries or islands but without further detail.

More recently PC examined specimens collected on mainland Greece and Cyprus by Paul GATT and Martin EBEJER (Malta) and in several parts of the region from the collections of the Natural History Museum, London (BMNH), the Muséum National d'Histoire Naturelle, Paris (MNHN), the Muséum d'Histoire-Naturelle, Neuchâtel, Switzerland (MHNH) and the Zoological Museum, Copenhagen, Denmark (ZMUC) obtained by several other collectors.

- (4) Jan ŠEVČÍK has determined material in the collection of the Silesian Museum, Opava (SMOC). This was mostly collected by Jindřich ROHÁČEK (Cyprus 2002 and Crete 2004), but also included some from the Greek mainland and Corfu, respectively collected by B. MOCEK and V. VRABEC.

The localities from which material has been examined are listed below under the six regions recognised for recording purposes in the Fauna Europaea project. For mainland Greece and the Peloponnese the name of the province, followed by a colon, precedes the locality details and localities on the Greek mainland are listed under the six administrative regions. For these regions the Greek name is given followed by the English name in brackets. The collector's name is given following details of each site and if all the material with that data is located in an institution this is stated following the collector's name. For islands the usual English spelling is given first and where the Greek spelling differs this is given in brackets. The spelling of many Greek localities varies considerably between different maps, mainly due to differing methods of transliteration from the Greek alphabet. If the spelling on the latest maps consulted differs consistently from that on the label, this is given in square brackets.

### Depositories of Material examined

BMNH	=	The Natural History Museum, London, UK
MHNH	=	Muséum d'Histoire-Naturelle, Neuchâtel, Switzerland
MNHN	=	Muséum National d'Histoire Naturelle, Paris
NMBA	=	Naturhistorisches Museum der Benediktiner Abtei, Admont, Austria
SMNH	=	Slovene Museum of Natural History, Ljubljana, Slovenia
SMOC	=	Slezské zemské muzeum (Silesian Museum), Opava, Czech Republic
ZMUC	=	Zoological Museum, Copenhagen, Denmark
ZSM	=	Zoologische Staatssammlung, Munich, Germany

### GREECE – Mainland Greece and nearby islands (Fauna Europaea area GR-GRC)

#### MAINLAND: ÍPEIROS (= Epirus)

- IP1. Préveza: Parga, 7–13.v.1972, olive groves (A. E. STUBBS, BMNH)  
 IP2. Préveza: Parga, Morfi Lake, 10–11.v.1972 (A. E. STUBBS, BMNH)  
 IP3. Préveza: Parga, Anthoussa, 100 m, 11–12.v.1972 (A. E. STUBBS, BMNH)  
 IP4. Ioannina: Vikos Aaos National Park, Vikos, 1500 m, 23.v.2000, pasture, 23.v.2000 (B. MOCEK, SMOC)  
 IP5. Ioannina: Pind Mts, Balndouma, *Quercus* forest, 24.iv.1994 (D. BECHEV)  
 IP6. Epir, Kokitos river, Themelo, (? probably 39°14'0"N, 20°31'59"E) 40 m, 16.v.1994 (I. SIVEC & B. HORVAT)

### MAINLAND: MAKEDONÍA (NW Greece = Greek province of Macedonia)

- MK1. Pieriá: south of Pteri [= Ftéri], 4.v.1979 (H. MALICKY)  
 MK2. Flórina: Monastir, iii.1917 (J. GOULDEN, MNHN)  
 MK3. Flórina: Flórina, vii.1917 (H. MARCELET, MNHN)  
 MK4. Flórina: Flórina, ii and iii.1918 (Dr JOYEUX, MNHN)  
 MK5. Flórina: Zelova, near Flórina, v.1918 (ARMÉE DE L'ORIENT, MNHN)  
 MK6. Flórina: Holéven, south of Monastir, ix–x.1917 (BUNICO, MNHN)

- MK7. Flórina: near Holéven, south of Monastir, 1918 (Dr BARBIER, MNHN)  
 MK8. Flórina: between Bukovo and Holéven, 1917 (BUNICO, MNHN)  
 MK9. Thessaloníki: Karasculi, near Salonika [= Thessaloniki], x.1917 (J. WATERSTON, BMNH)  
 MK10. Thessaloníki: near Salonika [= Thessaloniki], 1918 (J. WATERSTON, BMNH)  
 MK11. Flórina: Pissoderi [= Pisodéri], 1200 m, 13.v.1998, wood and stream (P. GATT)  
 MK12. Flórina: Andartiko [= Antartikó], 1000 m, 13.v.1998 (P. GATT)  
 MK13. Pieriá: Olympus Mts, Lithoron [= Litóchoro], 18–20.vii.1953 (E. JANSSEN & R. TOLLET)  
 MK14. Kozáni: Pieria Mts, east of Velventos [= Velvendos], 40°14'05"N, 22°07'51"E, 1330 m, 19.v.1994, (I. SIVEC & B. HORVAT)  
 MK15. Kozáni: Pieria Mts, 1440 m, 19.v.1994 (I. SIVEC & B. HORVAT)  
 MK16. Kozáni: Pieria Mts, 40°11'35"N, 22°05'31"E, 1480 m, 19.v.1994 (I. SIVEC & B. HORVAT)  
 MK17. Dráma: north of Sidironero, 1190 m, 21.v.1994 (I. SIVEC & B. HORVAT)  
 MK18. Dráma: west of Sidironero, 41°23'13"N, 24°12'03"E, 500 m, 21.v.1994 (I. SIVEC & B. HORVAT)  
 MK19. Dráma: Ditiki Rodopi, Elatia Forest, 1450 m, 21.v.1994 (I. SIVEC & B. HORVAT)  
 MK20. Dráma: Pfalacro Mts, north of Livaderó, 620 m, 21.v.1994 (I. SIVEC & B. HORVAT)  
 MK21. Dráma: north of Dipótama, 1000 m, 22.v.1994 (I. SIVEC & B. HORVAT)  
 MK22. Dráma: north of Dipótama, 1260 m, 41°23'32"N 24°38'46"E, 22.v.1994 (I. SIVEC & B. HORVAT)  
 MK23. Dráma: north of Dipótama, 1030 m, 41°23'53"N 24°38'06"E, 23.v.1994 (I. SIVEC & B. HORVAT)  
 MK24. Dráma: north of Dipótama, 1310 m, 23.v.1994 (I. SIVEC & B. HORVAT)  
 MK25. Dráma: north of Dipótama, 1400 m, 23.v.1994 (I. SIVEC & B. HORVAT)  
 MK26. Dráma: south of Dipótama, 41°21'22"N, 24°36'20"E, 440 m, 23.v.1994 (I. SIVEC & B. HORVAT)  
 MK27. Pieriá: Lithoron [= Litóchoro], 40°06'02"N, 22°29'52"E, 250 m, *Quercus coccifera*, 16.iv.1994 (D. BECHEV)  
 MK28. Thessaloníki: Lagína, *Pinus nigra-Quercus coccifera* wood, 18.iv.1991 (D. BECHEV)  
 MK29. Kilkís: Goumenissa, *Quercus-Carpinus* forest, 26.iv.1994 (D. BECHEV)

#### MAINLAND: THRÁKI (NE Greece = Trakia, Thrace)

- TR1. Évros: Lautros, 14.iv.1981 (J.-P. HAENNI, MHNN)  
 TR2. Rodópi: Sapka Mts, Sanda, 41°07'06"N, 25°49'43"E, 220 m, 24.v.1994 (I. SIVEC & B. HORVAT)  
 TR3. Rodópi: Sapka Mts, 41°11'02"N, 25°54'40"E, 545 m, 24.v.1994 (I. SIVEC & B. HORVAT)  
 TR4. Rodópi: Sapka Mts, 41°09'56"N, 25°55'17"E, 735 m, 24.v.1994 (I. SIVEC & B. HORVAT)  
 TR5. Rodópi: Anatoliki Rodopi, east of Drimi, 41°13'26"N, 25°35'35"E, 240 m, 25.v.1994 (I. SIVEC & B. HORVAT)

#### MAINLAND: THESSALÍA (= Thessaly)

- TH1. Tríkala: Pertuli [= Pertouli], 26.x.1972 (H. MALICKY)  
 TH2. Tríkala: 12 km east of Pertuli [= Pertouli] (H. MALICKY)  
 TH3. Magnisía: above Portalla [= Portaria], 15.vi.1979 (H. MALICKY)  
 TH4. Magnisía: east of Chánia, 15.vi.1979 and 13.x.1980 (H. MALICKY)  
 TH5. Lárissa: Pieria Mts, south of Livadi, 800 m, 18.v.1994 (I. SIVEC & B. HORVAT)  
 TH6. Lárissa: Farsala, UTM: FJ15, 300 m, *Pinus nigra* forest, 20.iv.1994 (D. BECHEV)  
 TH7. Tríkala: Kastraki (near Kalambaka and Meteora), *Quercus-Carpinus* forest, 24.iv.1994 (D. BECHEV)  
 TH8. Magnisía: Pílion Malaki, 18.iv.1979 (M. DETHIER, MHNN)  
 TH9. Lárissa: Karia [= Karyá], 40°00'N/22°26'E, 30.iv–1.v.1976 (H. MALICKY)

#### MAINLAND: STEREA ELLÁDA (= Central Greece)

- SE1. Aitolía-Akirnanía (= Etoloakirnanía): Agios Dimitrios, 25.x.1972 (H. MALICKY)  
 SE2. Fokída: Mount Parnassos above Polydrosos [= Polidrosos], 3.v.1976 (H. MALICKY)  
 SE3. Fokída: 3 km north of Kambos, 450 m, v.1979, north facing deciduous and evergreen oak woods with stream (A. E. STUBBS)  
 SE4. Fokída: 12 km south of Lidorikion [= Lidoriki], 500 m, v.1979, stunted *Quercus coccifera* (A. E. STUBBS)  
 SE5. Fokída: 1 km west of Ag. Efthymia, 450 m, v.1979, small fields with trees (A.E. STUBBS)  
 SE6. Fokída: 1 km south-west of Amphisia [= Amfissa], 350 m, v.1979, olive grove with stream (A. E. STUBBS)  
 SE7. Fokída: Delphi [= Delfi], 5.v.1979 (A. E. STUBBS)  
 SE8. Fthiótida, Thermopile [= Thermopýles], hot spring and marsh, 14.v.1998 (M. J. EBEJER)  
 SE9. Fokída: Drossohori [= Drosochóri], Parnassos Mts, 800 m, 15.v.1998, conifer forest (P. GATT)  
 SE10. Fokída: Drossohori [= Drosochóri], Parnassos Mts, 850 m, 15.v.1998, dwarf oak and meadows (P. GATT)  
 SE11. Fokída: Eptalophos [= Eptálofos], Parnassos Mts, 1400 m, 16.v.1998, meadows and conifers (P. GATT and M. J. EBEJER)  
 SE12. Fokída: Gravia, 16.v.1998, meadows and riverbank (P. GATT)  
 SE13. Fokída: Gravia, UTM: FH28, 730 m, 1.ix.1982 (D. BECHEV)  
 SE14. Fokída: south of Kastelia, Eleonas, UTM: FH28, *Quercus* forest, 21.iv.1994 (D. BECHEV)



**MAINLAND: ATTIKI (= Attica)**

AT1. Attikí: Parnes, north of Athens [= Athína], 23.v.1973 (H. MALICKY)

**PELOPPONESE (PELOPÓNNISOS)**

1. Arkadía: Alepochorion [= Alepochóri], 15.ix.1972 (H. MALICKY)
2. Argolida: Kefalarion [= Kefalári], 18.x.1972 (H. MALICKY)
3. Lakonía: near Mistras [= Mystrás], 13 km west of Sparta [= Sparti] (H. MALICKY)
4. Arkadía: east of Tripolis [= Trípoli], 26.iv.1979 (A. E. STUBBS)
5. Arkadía: Lake Takka, 27.iv.1979 (A. E. STUBBS)
6. Arkadía: south-west of Lake Takka, 27.iv.1979, shaded stream from spring (A. E. STUBBS)
7. Arkadía: north-west of Tripolis [= Trípoli], 28.iv.1979 (A. E. STUBBS)
8. Arkadía: 1 km west of Vitina, 900 m, 28.iv.1979, grassland (A. E. STUBBS)
9. Arkadía: 2 km north-west of Langadia, 800 m, 28.iv.1979, steep deciduous wood (A. E. STUBBS)
10. Ileía: Olympia, 170 m, 29.iv.1979, dry woods, river and stream (A. E. STUBBS)
11. Achaia: Kalogria, 1.v.1979, coastal dunes with slack (A. E. STUBBS)
12. Arkadía: near Vitina, Milaoundas, 900 m, 7.vii and 300 m, dry cave, 5.viii.1969 (L. TSACAS, MNHN)
13. Arkadía: Vitina, Dracotrypia cave, 20.vii.1969 (CARAYON, TSACAS & PLUOT, MNHN)
14. Achaia: (Mt) Helmos, 1700 m, 10.vi.1990, *Abies cephalonica* forest (J.-P. HAENNI & C. DUFOR, MHNN)
15. Lakonía: Taigetos Mts, 8 km wsw of Tripi [= Trýpi], 1100 m, 11.v.1990, stream (J.-P. HAENNI & C. DUFOR, MHNN)
16. Korinthia: 6 km north of Kalivia, 1600 m, 8.vi.1990, *Abies cephalonica* forest (J.-P. HAENNI & C. DUFOR, MHNN)
17. Achaia: Helmos, 6km wsw of Ag. Varvára, 1300 m, 9.vi.1990, cascade (J.-P. HAENNI & C. DUFOR, MHNN)
18. Lakonía: Taigetos Mts, 7km wsw of Palopanayia, 200 m, 12.vi.1990 (J.-P. HAENNI & C. DUFOR, MHNN)
19. Korinthia: Archeon Pheneos, by River Erymanthios, 17.iv.2003, pine forest (J. KRAMER)
20. Korinthia: Archeon Pheneos, 20.iv.2003, stream by monastery (J. KRAMER)
21. Korinthia: Archeon Pheneos, by River Erymanthios, 26.iv.2003, near Lake Doxa [= Doxis] (J. KRAMER)
22. Achaia: Mt Chelmos [= Helmos], above Kalavrita [= Kalávryta], 1700 m, 17–19.vi.1982 (B. SKULE & S. LANGE-MARK, ZMUC)
23. Lakonía: 5 km south of Monemvasía, various dates in periods 10.xi–23.xii.1983, 8–23.i.1984 and 17.v–25.vi.1984 (G. CHRISTENSEN, ZMUC)
24. Lakonía: Monemvasía, 24.x.1984 (G. CHRISTENSEN, ZMUC)
25. Achaia: near Koutia, 1918 (E. JUPULL & V. ODIZIRE, MNHN)
26. Achaia: Pendayi, 38°35'N/22°00'E, 950 m, 2–3.vi.1975 (H. MALICKY).
27. Arkadía: Kastria, Ton Limnon cave, 15.v.1974 ("MUS. GENÈVE", MNHN)
28. Arkadía: west of Vitina, 21.v.1979 (H. MALICKY)
29. Korinthia: Archeon Pheneos, 6.v.2004, stream by monastery (J. KRAMER)
30. Korinthia: Archeon Pheneos, 7.v.2004, upper meadow stream (J. KRAMER)
31. Korinthia: Archeon Pheneos, River Erymanthios, 8.v.2004, near old *Acer* trees (J. KRAMER)
32. Korinthia: Archeon Pheneos, Lake Doxa [= Doxis], 8.v.2004 (J. KRAMER)
33. Korinthia: Archeon Pheneos, Lake Doxa [= Doxis], 9.v.2004, stream margins (J. KRAMER)
34. Korinthia: Archeon Pheneos, Lake Doxa [= Doxis], 10.v.2004, stream margins (J. KRAMER)
35. Lakonía: Máni, Stoupa sl., UTM S 0612 4078, 24.v.2004 (D. GIBBS)

**CEPHALONIA (KEFALONIA)**

1. Lixouri, 14.v.1981, elm hedge by flowery meadow (I. F. G. McLEAN)
2. Mount Enos, 1100 m, 15.v.1981, limestone hillside (I. F. G. McLEAN)
3. Mount Enos, 1000 m, 15.v.1981, dry gully (I. F. G. McLEAN)
4. Mount Enos summit, 1630 m, 15, 18 and 20.v.1981, *Abies cephalonica* forest (I. F. G. McLEAN)
5. 1 km north-west of Kato Katelios, 16.v.1981, dry gorge (I. F. G. McLEAN)
6. Kato Katelios, 16.v.1981, stream from road to sea shaded by plane trees (I. F. G. McLEAN)
7. Mount Enos, 1400 m, 18.v.1981, *Abies cephalonica* forest (I. F. G. McLEAN)
8. Pastra, 19 and 22.v.1981, wooded gorge with stream (I. F. G. McLEAN)
9. North-west of Tzanata, 19.v.1981, shaded stream with mossy seepages (I. F. G. McLEAN)
10. Mount Enos, 1300 m, 20 and 23.v.1981, area with large amount of dead wood (I. F. G. McLEAN)
11. Mount Enos, east side, 2–4.vi.1977 (H. MALICKY)
12. North-west of Tzanata, 28.ix.1980 (H. MALICKY)

**CORFU (KÉRKIRA)**

1. Ayia Kiriahi, 2.v.1972 (A.E. STUBBS, BMNH)
2. Dassia, 4.v.1972 (A.E. STUBBS, BMNH)

3. Spartilas, 500 m, 3.v.1972 (A.E. STUBBS, BMNH)
4. Strenillas, 700 m, 3.v.1972 (A.E. STUBBS, BMNH)
5. Marbella Beach Hotel, 5 km north of Messongli, 25.vi.1976 (J.W. ISMAY)
6. Benitses, 29.iv.1980, olive groves with rich ground flora, near stream (I. F. G. McLEAN)
7. Benitses, 29.iv.1980, beside stream in small gorge (I. F. G. McLEAN)
8. Kavos, 1.v.1980, olive groves with rich ground flora (I. F. G. McLEAN)
9. Kavos, 1.v.1980, beside track to monastery (I. F. G. McLEAN)
10. Kavos, mixed woodland around monastery Panayia Arkoudillas (I. F. G. McLEAN)
11. Gastouri, 4.v.1980. 4.v.1980, narrow gorge south of village (I. F. G. McLEAN)
12. Paleocastritsa, 5.v.1980, dry gorge north of village (I. F. G. McLEAN)
13. Linia, 5.v.1980, track towards Lake Korission, rich ground flora (I. F. G. McLEAN)
14. Mount Pantokrátor, 2 km west of main peak, 1000 m, 9.v.1980 (I. F. G. McLEAN)
15. Kentroma, small caves beside gorge to the south-west, 9.v.1980 (I. F. G. McLEAN)
16. Kinopiastes, 11.v.1980, roadside vegetation (I. F. G. McLEAN)
17. Ag. Deka, 11.v.1980, dry gorge north of village (I. F. G. McLEAN)
18. Ag. Deka to Benitses, 11.v.1980, olive groves (I. F. G. McLEAN)
19. East of Tomploni. 10.xi.1980 (H. MALICKY)
20. Nesaria, 11.vi.1977 and 9.xi.1980 (H. MALICKY)
21. Barbati, 16–23.vi.2002 (V. VRABEC, SMOC)

### **EUBOA (ÉVVOIA)**

1. Southwest of Platanistos, 10.x.1980 (H. MALICKY)
2. Ano Steni, 12.x.1980 (H. MALICKY)
3. Steni Dirfia, 4.vi.1979 (H. MALICKY)
4. Above Stropones, 24.v.1978 and 11–12.x.1980 (H. MALICKY)
5. South of Komitou, 6.vi.1979 (H. MALICKY)
6. Agios Dimitrios, 21–22.v.1974 (H. MALICKY)

### **PAXOS (PAXI) (near Corfu)**

1. Gaios, 12.v.1980, damp valley among olives (A.G. IRWIN)
2. Agrilas, 18.v.1980, coastal scrub (A.G. IRWIN)

### **SAMOTHRACE (SAMOTHRÁKI)**

1. Therme [= Thérma], 16.viii.1962 (GUICHARD & HARVEY, BMNH)

### **THASOS (THÁSOS)**

1. Above Mariés, 17.vi.1979 and 17.x.1980 (H. MALICKY)
2. 2 km north-east of Mariés, 17.vi.1979 (H. MALICKY)
3. 5 km east of Mariés, 17.x.1980 (H. MALICKY)
4. Dipotamos, 18.vi.1979 (H. MALICKY)
5. Above Prinos, 16.vi.1979 (H. MALICKY)

## **North Aegean Islands (VÓREION AIIYÁION) (Fauna Europaea area GR-AEG)**

### **CHIOS (KHÍOS)**

1. 2 km north of Fitá, 28.v.1975 (H. MALICKY)
2. Pelinato mountain range, altitude 400–700 m, 17.v.1973 (H. MALICKY)
3. 1 km north of Spartunda, 22.v.1975 (H. MALICKY)
4. 5 km northeast of Pirama, 20.v.1975 (H. MALICKY)
5. South of Kurunia, 28.v.1973 (H. MALICKY)
6. North of Keramos (H. MALICKY)

### **IKARIA (IKARÍA)**

1. Raches, 31.v.1979 (H. MALICKY)

### **LESBOS (LÉSVOS)**

1. South of Neochorion, 25.v.1975 (H. MALICKY)
2. Ambeliko, 25.v.1975 (H. MALICKY)

3. 3 km northwest of Agiassos, 26.v.1975 (H. MALICKY)
4. 1 km northwest of Megolochiri, 24.v.1975 (H. MALICKY)
5. Mytilene (= Mitilini), iv.1917 (Dr LANDRIEU, Armée de l'Orient, MNHN)

### **SAMOS (SÁMOS)**

1. Below Manolates, 27–29.v.1979 (H. MALICKY)

## **Cyclades Islands (KIKLÁDES) (Fauna Europaea area GR-CYC)**

### **ANDROS (ÁNDROS)**

1. Revmata, 21.x.1980 (H. MALICKY)
2. North of Apikia, 13.vi.1979 (H. MALICKY)

### **KITHIRA**

1. West of Avlemonas, 8.v.1976 (H. MALICKY)

### **MILOS (MÍLOS)**

1. Malaise trap in Citrus orchard, 8–14.iv.1985 (D.J. DE C. HENSHAW)

### **NAXOS (NÁXOS)**

1. Above Koronis, 26–28.x.1980 (H. MALICKY)

### **PAROS (PÁROS)**

1. Northwest of Petaludes, 18.v.1976 (H. MALICKY)

## **Dodecanese Islands (DODEKÁNISOS) (Fauna Europaea area GR-DOD)**

### **RHODES (RÓDHOS)**

1. West of Profitis Ilias, 3.iii.1982 (H. MALICKY)
2. West of Eleousa, 3.iii.1982 (H. MALICKY)
3. Between Psinthos and Archipolis, 2.iii.1982 (H. MALICKY)
4. 2 km north of Laerma, 5.iii.1982 (H. MALICKY)
5. 2 km northeast of Profilia, 6.v.1975 (H. MALICKY)
6. 1 km west of Kellithia, 10.v.1975 (H. MALICKY)
7. 5 km north of Laerma, 3–4.iii.1982 (H. MALICKY)
8. Epta Piges, 4–6.xi.1980 (H. MALICKY)

## **Crete (KRÍTI) (Fauna Europaea area GR-KRI)**

1. Georgioupolis, 18.xii.1981 (H. MALICKY)
2. Kefalio, 16.v.1979 (H. MALICKY)
3. Kakopetros, 1.ix.1972, 3.v.1977, 20.v.1977, 13.v.1979 and 20.ii.1982 (H. MALICKY)
4. Gorge of Topolia, 20.v.1977 (H. MALICKY)
5. East of Ierapetra, 18.iv.1971 (H. MALICKY)
6. Pantanasa, 26–27.ix.1972 (H. MALICKY)
7. East of Agios Ioannis, 8.v.1979 (H. MALICKY)
8. Mesa Potami, 8–10.v.1979 (H. MALICKY)
9. Kotsifiana, 20.v.1977 (H. MALICKY)
10. Moni Veniou, 23.v.1977 and 18.v.1979 (H. MALICKY)
11. Fassa valley, west of Chliaro, 18–20.v.1977 (H. MALICKY)
12. Aligi near Sises, 2.x.1972 and 19.v.1977 (H. MALICKY)
13. Katsomatados, 2–3.x.1972 (H. MALICKY)
14. Kiliaria near mouth, 18.ii.1982 (H. MALICKY)
15. Kalonichtis, 14.iv.1978 and 16–17.ii.1982 (H. MALICKY)
16. Kaminaki (H. MALICKY)
17. Near Kefali, 20.ii.1982 (H. MALICKY)
18. Knossos, 150 m, 16–17 and 28.iv.1980, shaded area by stream and flowery lanes (A. E. STUBBS)
19. Schisma, Elounda, 17.iv.1980, saltmarsh (A. E. STUBBS)
20. Kritsa, 500 m, 18.iv.1980, rocky valley east of village (A. E. STUBBS)

21. 1 km south of Paliani, 500 m, 19.iv.1980, field by stream (A. E. STUBBS)
22. Gortyna, Aghii Deka, 180 m, 19.iv.1980, field by stream (A. E. STUBBS)
23. 2 km north of Melambes, 450 m, 22.iv.1980, by stream (A. E. STUBBS)
24. 1 km south of Spili, 500 m, 22.iv.1980, *Quercus coccifera* by stream (A. E. STUBBS)
25. West side of Hunia, 24.iv.1980, coastal dunes with river (A. E. STUBBS)
26. Topolia, by Aghia Sophia cave, 300 m, 26.iv.1980, scrubby hillside (A. E. STUBBS)
27. 0.5 km north-west of Siroules, 400 m, 26.iv.1980, shaded ravine (A. E. STUBBS)
28. 2 km north-east of Plakalona, 27.iv.1980, scrubby hillside (A. E. STUBBS)
29. Hliaro, 200 m, 27.iv.1980, stream and orange grove (A. E. STUBBS)
30. North of Rodopou, 13.v.1982, isolated tress and rock clefts (I. F. G. McLEAN)
31. South of Rodopou at Aspra Nera crossroads, 13.v.1982 (I. F. G. McLEAN)
32. Aspra Nera crossroads to main road, 13.v.1982, olive groves (I. F. G. McLEAN)
33. Rodopou, 13.v.1982, stream gorge (I. F. G. McLEAN)
34. Samaria Gorge, 14.v.1982, pine and cypress forest (I. F. G. McLEAN)
35. Samaria Gorge, north of Samaria Village and spring south of village, 14.v.1982 (I. F. G. McLEAN)
36. Kotsifiana, 16.v.1982, shaded stream and olive groves (I. F. G. McLEAN)
37. Near junction for Skordala, 17.v.1982, by olive grove (I. F. G. McLEAN)
38. North of Omalos, 1500 m, 17.v.1982, small gorge (I. F. G. McLEAN)
39. Samaria Gorge, 17.v.1982, 1 km in, sweeping *Pinus brutia* (I. F. G. McLEAN)
40. Omalos Plateau, 17.v.1982, pond margin (I. F. G. McLEAN)
41. Near Askyfou, before ascent to Imbros Plateau, 18.v.1982 (I. F. G. McLEAN)
42. East Lassithi Plateau, 19.v.1982, stream bed (pools only) (I. F. G. McLEAN)
43. West of Mesa Potami, 19.v.1982, flowing stream in cultivated area (I. F. G. McLEAN)
44. Between Vathipetro and Choudetsi, 20.v.1982, almond tree (I. F. G. McLEAN)
45. Between Choudetsi and Chambas, 20.v.1982, almond tree (I. F. G. McLEAN)
46. Vai Palm Forest, 21.v.1982 (I. F. G. McLEAN)
47. Mount Psiloritis, 1500–1600 m, 24.v.1982, ascent to snowfield (I. F. G. McLEAN)
48. Mount Psiloritis, 1600 m, 24.v.1982, edge of snow patches (I. F. G. McLEAN)
49. Mount Psiloritis, Ideon Antron cave, 24.v.1982 (I. F. G. McLEAN)
50. Mount Agion Pneuma, 1700–2000 m, 29.v.1936 (R. E. GATHORNE-HARDY, BMNH)
51. SW Crete, Imbros gorge, 12.v.2004, along brook (J. ROHÁČEK, SMOC)
52. NW Crete, Vrysses, 3 km NW, 12.v.2004, mixed forest (M. VÁLA, SMOC)
53. NW Crete, Stilos, 1 km N, 13.v.2004, riverside, under trees (J. ROHÁČEK, SMOC)
54. SW Crete, Samaria gorge, NW part, 14.v.2004, under trees at brook (J. ROHÁČEK, SMOC)
55. SW Crete, Imbros gorge, southern part, 15.v.2004, under trees and rocks (J. ROHÁČEK, SMOC)
56. NW Crete, Episkopi, Petres river, 16.v.2004, under trees on river banks (J. ROHÁČEK, SMOC)
57. W Crete, Omalos, 3 km SW, 17.v.2004, under trees in pasture (J. ROHÁČEK, SMOC)
58. W Crete, Prases, 4 km SW, 17.v.2004, along small brook in forest (J. ROHÁČEK, SMOC)
59. W Crete, Prases, 4 km SW, 18.v.2004, along creek (J. ROHÁČEK, SMOC)
60. W Crete, Prases, 2 km W, 21.v.2004, under *Castanea* trees (J. ROHÁČEK, SMOC)
61. W Crete, Prases, 4 km SW, 21.v.2004, near small creek (J. ROHÁČEK, SMOC)
62. W Crete, Nea Roumata, 2 km NE, 21.v.2004, along brook in forest (J. ROHÁČEK, SMOC)
63. W Crete, Kakopetros, 1 km S, 23.v.2004, along brook (J. ROHÁČEK, SMOC)

## CYPRUS (Fauna Europaea area CY)

1. South of Asimu, 14.v.1974 (H. MALICKY)
2. East of Platres, 27–28.iv.1974 (H. MALICKY)
3. Pedhoulás (Troodos Mountains), 4.iv.1983 (H. MALICKY)
4. Creek near Vavla, 6.iv.1983 (H. MALICKY)
5. 7 km south of Milikuri, 1.v.1974 (H. MALICKY)
6. 4 km east of Kakopetria, 14.v.1974 (H. MALICKY)
7. Moni Trooditissa, 29–30.iv.1974 (H. MALICKY)
8. Agios Nikolaos, 11.v.1974 (H. MALICKY)
9. 1.5 km WNW of Apia Anna, 26.iv.1982, gulleys with pine (A. E. STUBBS)
10. Tsádhá, 1.v.1982 (A. E. STUBBS)
11. Cedar Valley, 1200 m, 2.v.1982, cedar, pine and oak forest (A. E. STUBBS)
12. Kambos, 785 m, 3.v.1982, cultivated valley bottom with stream (A. E. STUBBS)
13. 4 km east of Kykko, 950 m, 3.v.1982, pine forest (A. E. STUBBS)

14. 1 km west of Pedhoulás, 1130 m, 3.v.1982, alder flushes and orchards (A. E. STUBBS)
15. 0.5 km north of Pedhoulás, 1050 m, stream in orchards (A. E. STUBBS)
16. Prodhromus, 1500 m, 3.v.1982, pine forest (A. E. STUBBS)
17. 2 km south of Prodhromus, 1400 m, 4.v.1982, stream with alders (A. E. STUBBS)
18. Pano Platres, 1150–1400 m, 4–5.v.1982, stream with alders and woods (A. E. STUBBS)
19. Ayios Therapon, 16.v.1983, roadside scrub and abandoned cultivation terraces (I. F. G. McLEAN)
20. Platres, 1200 m, 21.v.1983, stream in Golden Oak forest (I. F. G. McLEAN)
21. Platres, 1400 m, 21.v.1983, beside and above Caledonian Falls, Golden Oak forest and plane trees by the stream (I. F. G. McLEAN)
22. Mount Olympus summit, 1950 m, 22 and 23.v.1983, *Pinus nigra* (I. F. G. McLEAN)
23. Cedar Valley, eastern arm, 1100 m, 22 and 24.v.1983, Golden Oak forest (I. F. G. McLEAN)
24. Prodhromus, 1200 m, 24.v.1983, spring and stream gully (I. F. G. McLEAN)
25. Cedar Valley, western arm, 24.v.1983, dry stream in Golden Oak forest (I. F. G. McLEAN)
26. Cedar Valley, 1100 m, 24.v.1983, seepages on roadside bank between east and west arms of the valley (I. F. G. McLEAN)
27. Asinou, iii.1953 (P. A. BUXTON, BMNH)
28. Kyperounda, 1500 m, iii.1953 (P. A. BUXTON, BMNH)
29. Kyrenia, iii.1953 (P. A. BUXTON, BMNH)
30. Stavros, 1000 m, iii.1953 (P. A. BUXTON, BMNH)
31. Platres, 17–22.v.1967 (C. F. JENKINS, BMNH)
32. Dhavios, 10.iv.1971 (K. M. GUICHARD, BMNH)
33. Mesa Potamis, Troodos Mts, 12.vii.1937 (G. A. MAVROMOUSTAKIS, BMNH)
34. Plantania, Forest Station, 1500 m, 20.iv.1947 (G. A. MAVROMOUSTAKIS, BMNH)
35. Troodos Mts, 1300 m, 7.ix.1951 (? collector, BMNH)
36. Akrotiri, 34°36'N/32°58'E, 22.iv.2002, beach and saltmarsh (P. GATT and M. J. EBEJER)
37. Plano Platres, Caledonian Falls, 1250 m, 34°34'N/35°52'E, 25.iv.2002, pine forest, stream (P. GATT)
38. Akrounta Forest, 24.iv.2002 (P. GATT)
39. Agios Nikolaos, 2 km north-east, 780 m, 25.iv.2002, maquis (P. GATT)
40. Pano Lefkara, 290 m, 26.iv.2002, dam, maquis, stream (P. GATT)
41. Lemesos Forest, 3 km west Arakapas, 600 m, 29.iv.2002, stream (P. GATT)
42. Lemesos Forest, Kellaki, 650 m, 29.iv.2002 (P. GATT)
43. Omodos, Kissousa, 570 m, 34°49'N/32°48'E, 27.iv.2002, stream, mixed forest (P. GATT)
44. Limassol, 29.iv.2002, beach (P. GATT)
45. Diarizos valley, Kidasi, 245 m, 34°43'N/32°25'E, 23.iv.2002, stream and mixed forest (M. J. EBEJER)
46. 6 km south of Zygi, 34°44'N, 32°44'E, 24.iv.2002, beach, stream, *Tamarix*, *Phragmites* (M. J. EBEJER)
47. Akrounta, 12 km north, 640 m, 34°48'N/33°05'E, 24.iv.2002, pine forest and *Cistus* (M. J. EBEJER)
48. Akrounta, 130 m, 34°48'N/33°30'E, 24.iv.2002, meadow, stream (M. J. EBEJER)
49. Troodos Mts, Caledonian Falls, 34°54'N/32°52'E, 25.iv.2002, pine forest (M. J. EBEJER)
50. Troodos Mts, Caledonian Falls, 1220 m, 34°36'N/32°58'E, 25.iv.2002 (M. J. EBEJER)
51. Malia, Kissousa, 550 m, 34°48'N/32°47'E, 27.iv.21002, mixed forest (M. J. EBEJER)
52. Kalo Chorio, 6 km south, 580 m, 24°49'N/33°00'E, 29.iv.2002, pine forest, stream, maquis (M. J. EBEJER)
53. 2 km south-west of Kakopetria, 11.iv.2002, brook (J. ROHÁČEK, SMOC)
54. Troodos Mountains, Troodos env., 11.iv.2002, pine forest (J. ROHÁČEK, SMOC)
55. 4 km east of Kykko, 12.iv.2002, pine forest (J. ROHÁČEK, SMOC)
56. Pano Platres, Caledonian Falls, 12.iv.2002, under trees at brook (J. ROHÁČEK, SMOC)
57. 4 km north-east of Agios Nikolaos, 13.iv.2002, steppe forest (J. ROHÁČEK, SMOC)

## Systematic treatment

Data are given in full in the case of new species and of other studied type material. For other material only the site numbers are listed (dates also if different dates are represented by the same site data), followed by numbers of specimens examined, under each of the geographical divisions recognised above. In the case of the material collected by I. SIVEC and B. HORVAT the numbers and sex of the specimens were not recorded. For each species the type of known distribution is indicated under Remarks, with reference to the ten categories listed in the concluding section on Discussion. With the exception of *Heterotricha*, for which there is currently no family assignment, all taxa are arranged alphabetically. The systematic arrangement follows that adopted by CHANDLER (2004)



### *Heterotricha* Group

#### *Heterotricha takkae* CHANDLER, 2002

**Type material.** **Holotype:** ♂, GREECE: Peloponnese: south west of Lake Takka (site 6), 27.iv.1979, swept by shaded stream, leg. A. E. STUBBS (BMNH). **Paratypes:** ♀, same data as holotype (BMNH); ♀, Crete (site 20), Kritsa, rocky valley, 18.iv.1980; ♀, Crete (site 23), 2 km north of Melambos, by stream, 22.iv.1980; ♀, Crete (site 28), 2 km west of Plakalona, scrubby hillside, 27.iv.1980 (leg. A. E. STUBBS, in PC collection).

**Remarks.** Distribution type 6. CHANDLER (2002) described this species from Greek material and also recorded it from Switzerland and Italy.

### Family BOLITOPHILIDAE

#### *Bolitophila (Bolitophila) cinerea* MEIGEN, 1818

**Material.** GREECE: Mainland: MK16; MK25.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species, with records from most parts of Europe, the Caucasus and the Far East of Russia (ZAITZEV 1999b).

#### *Bolitophila (Bolitophila) saundersii* (CURTIS, 1836)

**Material.** GREECE: Mainland: MK24; Peloponnese, 20, 1♂; Crete: 1, 2♂♂.

**Remarks.** New to Greece. Distribution type 2. This is also a widespread Palaearctic species (ZAITZEV 1999b) and occurs in North Africa (Algeria: BURGHELE-BALACESCO 1966) and Madeira (CHANDLER & RIBEIRO 1995).

#### *Bolitophila (Cliopisa) pseudohybrida* LANDROCK, 1912

**Material.** GREECE: Mainland: MK16.

**Remarks.** New to Greece. Distribution type 2. Another widespread Palaearctic species, reaching the Far East of Russia (ZAITZEV 1999b).

### Family DIADOCIDIIDAE

#### *Diadocidia (Diadocidia) ferruginosa* (MEIGEN, 1830)

**Material.** GREECE: Mainland: MK16; MK22. Thasos: 1, 2♂♂.

**Remarks.** New to Greece. Distribution type 2. This is the most widespread Palaearctic species of the genus, frequent in Europe and recorded from Iran (LAŠTOVKA & MATILE 1972).

#### *Diadocidia (Diadocidia) spinosula* TOLLET, 1948

**Material.** GREECE: Mainland: MK17; MK25.

**Remarks.** New to Greece. Distribution type 2. Also a widespread Palaearctic species, including the Caucasus (JOOST & PLASSMANN 1976) and Altai (ZAITZEV 1994).

#### *Diadocidia (Adidocidia) valida* MIK, 1874

**Material.** GREECE: Mainland: MK15.

**Remarks.** New to Greece. Distribution type 3. This species is widespread in Europe and also known from Azerbaijan (ZAITZEV 1994).

### Family DITOMYIIDAE

#### *Symmerus annulatus* (MEIGEN, 1830)

**Material.** GREECE: Corfu: 21, 1♂.

**Remarks.** New to Greece. Distribution type 3. This is a widespread species in Europe and has also been recorded from Azerbaijan (ZAITZEV 1994).

## Family KEROPLATIDAE

## Subfamily Keroplatinae

## Tribe Keroplatini

*Cerotelion striatum* (GMELIN, 1790)

= *lineatum* (FABRICIUS, 1775), preocc.

**Material.** GREECE: Mainland: SE12 1♂. Corfu: 12, 1♂, 1♀; 15, 1♂.

**Remarks.** New to Greece. Distribution type 3. This species is widespread in Europe, including Bulgaria (BECHEV 2002a) and is also recorded from Iran (MATILE 1969b) and Azerbaijan (ZAITZEV 1994).

*Keroplatus reaumurii* (DUFOUR, 1839)

**Material.** GREECE: Mainland: IP1, 1♀; Samothrace: 1, 2♂♂.

**Remarks.** Distribution type 3. This species was recorded as new to Greece, from Corfu, by KURINA (2004). It is widespread in central and southern Europe, including Bulgaria (BECHEV 2002a) and has also been recorded from Morocco (MATILE 1986) and Azerbaijan (ZAITZEV 1994).

## Tribe Orfeliini

*Antlemon halidayi* (LOEW, 1871)

**Material.** GREECE: Peloponnese: 11, 1♂. Cephalonia: 1, 1♀. Corfu: 8, 1♀; 12, 3♂♂, 1♀; 17, 1♂. Milos: 1, 15♂♂, 7♀♀. Crete: 19, 2♂♂, 1♀; 20, 1♀; 22, 1♂; 26, 1♂; 29, 1♂; 31, 5♂♂, 1♀; 32, 4♂♂; 33, 2♀♀; 1♀; 37, 1♂; 41, 1♂; 56, 1♂.

**Remarks.** Distribution type 7. LOEW (1871) described this species from Rhodes as well as Italy (Sicily). MATILE (1977b) gave a record from Patmos. It is widespread in the Mediterranean and also known from the Canary Islands and Madeira (CHANDLER & RIBEIRO 1995). The female from Cephalonia was taken at flowers of Apiaceae.

*Isonneuromyia czernyi* (STROBL, 1909)

**Material.** GREECE: Cephalonia: 8, 1♀.

**Remarks.** New to Greece. Distribution type 6. STROBL (1909) described this species from a Spanish male. The Greek female agrees with the description and was tentatively determined as *czernyi* by LOÏC MATILE, but finding of males would be desirable for confirmation.

*Isonneuromyia semirufa* (MEIGEN, 1818)

**Material.** GREECE: Mainland: MK6. Crete: 4, 1♀.

**Remarks.** New to Greece. Distribution type 2. This species is widespread in the Palaearctic, common in Europe and reaching the Far East of Russia and Japan (ZAITZEV 1999b). It has many synonyms, being variable in coloration.

*Macrorrhyncha* WINNERTZ, 1846

This genus was characterised by MATILE (1975), who recognised seven European species and provided a key for six of them (except for *M. brevirostris* (LUNDSTRÖM, 1911) of which he had not examined a male) and noted that the Japanese species *M. ezoensis* (OKADA, 1938) also belonged here. Since then eight further Palaearctic species and a subspecies have been described (WU & YANG 1992, BECHEV 1992b and 1997b, ZAITZEV 1994, CHANDLER 1994, CHANDLER & BLASCO-ZUMETA 2001 and KURINA 2004), while three further species are being described from Japan by UESUGI (2005). Also PLASSMANN (1978) described *Asindulum exemplum*, which BECHEV (1992a) showed to belong to *Macrorrhyncha* and CHANDLER (1995) indicated that this was synonymous with *M. collarti* (TOLLET, 1955), previously regarded as a synonym of *M. flava* WINNERTZ. It is considered likely from ZAITZEV's figures that *M. gorodkovi* ZAITZEV, 1994 is also synonymous with *M. collarti*. His other species, *M. luteola* ZAITZEV, 1994, from the Far East of Russia (Sikhote-Alin) is distinct from other Palaearctic species in having the process bearing an apical seta, internal to the gonostylus, long and slender. The addition of another three species in the present paper brings the European total to fifteen, with one other species described from Israel. In Europe this has proved to be a predominantly Mediterranean genus, with most species apparently rather local in occurrence. At least seven species are now known to occur in Greece and the Bulgarian fauna comprises three additional species (*M. collarti*, *M. flava* and *M. veleka* BECHEV, 1992). In view of this increasing knowledge of *Macrorrhyncha* a key is provided to the known western Palaearctic species.

**Key to western Palaearctic species of *Macrorrhyncha* WINNERTZ**

- 1 Mediotergite bearing setae ..... 2
- Mediotergite devoid of setae ..... 5
- 2 Body mainly or entirely black with some grey dusting. Haltere black. Proboscis as long as head height. Male genitalia, Figs 5, 11–12; ovipositor, Fig. 17 ..... ***M. ibis spec. nov.***
- Body at least partly yellow. Haltere yellowish brown ..... 3
- 3 Hind coxa widely brown at base. Mediotergite dark brown on disc. Mesonotum with three well marked dark stripes, more or less fused posteriorly. Abdomen with tergites all dark brown. [Male genitalia: MATILE 1975, Figs 13, 18] ..... ***M. ancae* MATILE**
- Coxae and mediotergite yellow. Mesonotum yellow; stripes if present at most brownish yellow. Abdomen with tergites at least partly yellow ..... 4
- 4 Abdomen with some brown markings on disc of tergites 2–5, 6–7 all dark brown. Stem of median fork 4 times as long as radiomedial fusion. [Genitalia of both sexes: MATILE 1975, Figs 12, 16, 23] ..... ***M. flava* WINNERTZ**
- Abdomen entirely yellow. Stem of median fork little more than twice as long as radio-medial fusion. Only female known. [Ovipositor: MATILE 1975, Fig. 21] ..... ***M. italica* (COSTA)**
- 5 Thorax brownish yellow without distinct darker markings; if stripes are present only slightly darker than ground coloration ..... 6
- Thorax at least partly dark brown or black ..... 9
- 6 Proboscis as long as height of head. Abdomen mainly dark brown, with yellow basal markings on tergites 1–5. Male genitalia (Figs 1, 13–14) distinctive, with gonostylus bearing narrow elongate processes ..... ***M. laconica spec. nov.***
- Proboscis shorter than head height, at most a little longer than height of eye. Abdomen all dark or with some tergites yellow on apical margins ..... 7
- 7 Proboscis about as long as eye height. Male genitalia bearing a dense brush of black setae on dorsal lobe of gonocoxites. [Genitalia of both sexes: MATILE 1975, Figs 15, 17, 25; CHANDLER 1992, Figs 6–9] ..... ***M. rostrata* (ZETTERSTEDT)**
- Proboscis distinctly shorter, not more than half eye height. Male genitalia with dorsal lobe of gonocoxites with setae not in a dense brush or absent ..... 8
- 8 Abdomen with tergites 3–6 yellow apically. Costa extends halfway from  $R_5$  to  $M_1$ . Male genitalia (Figs 3, 7–8) with dorsal lobe of gonocoxites weakly developed but bearing strong setae; ovipositor, Fig. 9 ..... ***M. brevirostris* (LUNDSTRÖM)**
- Abdomen entirely dark brown. Costa extends a third of distance from  $R_5$  to  $M_1$ . Male genitalia with dorsal lobe of gonocoxites elongate but bare (Fig. 4); ovipositor, Fig. 10. [Male genitalia: CHANDLER & BLASCO-ZUMETA 2001, Figs 2–4] ..... ***M. gallica* CHANDLER & MATILE**
- 9 Mesonotum and abdomen uniformly black ..... 10
- Mesonotum dark on disc but side margins more or less distinctly yellow or brownish. Haltere yellow ..... 13
- 10 Gonocoxites lacking dorsal process. Bridge of gonocoxites and tergite 9 medially constricted ..... 11
- Gonocoxites with well developed blunt dorsal process. Bridge of gonocoxites and tergite 9 medially narrow but not markedly constricted ..... 12
- 11 Haltere yellow. Gonostylus broader in lateral view with ventral lobe more developed. [Genitalia of both sexes: CHANDLER 1994, Figs 30–34] ..... ***M. guichardi* CHANDLER**

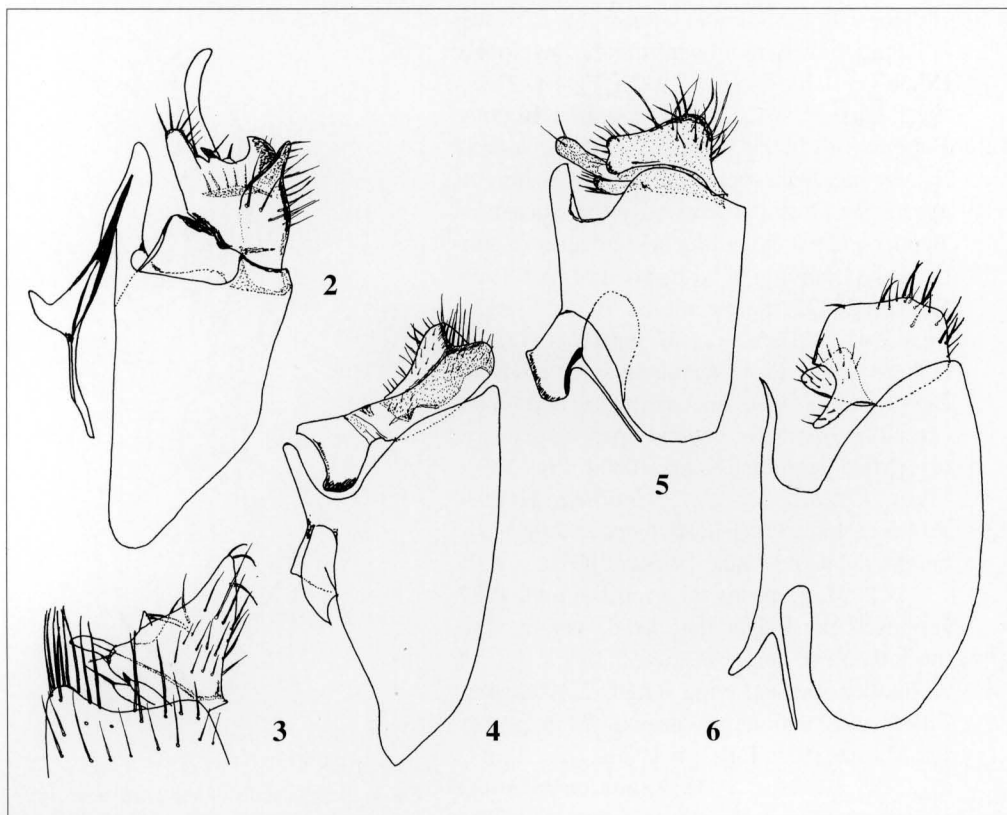
- Haltere with black knob. Gonostylus narrower in lateral view without ventral lobe developed. [Male genitalia: BECHEV 1992b, Figs 1–2] ..... *M. veleka* BECHEV
- 12 Haltere with black knob. Proboscis distinctly longer than head, practically twice as long as eye height. Dorsal process of gonocoxites more slender and not extending beyond apex of gonostylus. [Genitalia of both sexes: MATILE 1975, Figs 11, 20, 22; male genitalia: BECHEV 1992b, Figs 3–4] ..... *M. geranias* (LOEW)
- Haltere yellow. Proboscis about as long as head. Dorsal process of gonocoxites long and broad, extending distinctly beyond apex of gonostylus. [Male genitalia: KURINA 2004, Figs 1–3] ..... *M. atticae* KURINA
- 13 Proboscis longer than head, twice as long as eye height. [Male genitalia: BECHEV 1997b, Fig. 2] ..... *M. geranias thracica* BECHEV, 1997
- Proboscis not longer than head, usually little more than eye height ..... 14
- 14 A smaller species, wing length 2.8–3.2 mm. Pleura and mediotergite brown. [Male genitalia: MATILE 1975, Figs 14, 19] ..... *M. hispanica* (STROBL)
- Larger species, wing length about 4.0 mm or more ..... 15
- 15 Vein  $R_4$  meets costa less than twice its length from tip of  $R_1$ . Proboscis longer than eye (associated female has thorax all dark so would run to couplet 10 above) Pleura and mediotergite all dark. [Genitalia of both sexes: CHANDLER 1994, Figs 26–29] ..... *M. ardea* CHANDLER
- Vein  $R_4$  meets costa more than twice its length from tip of  $R_1$ . Proboscis at most as long as eye height. Pleura or mediotergite often with yellow markings ..... 16
- 16 Side margins of mesonotum distinctly yellow and pleura with yellow markings on mesepimeron and laterotergite. Proboscis as long as eye height. Male genitalia (Figs 6, 15–16) with gonostylus apically blunt with short dorsal processes; ovipositor Fig. 18.. ..... *M. pelargos* spec. nov.
- Side margins of mesonotum obscurely brownish; mediotergite narrowly yellow laterally. Proboscis about as long as two-thirds eye height. Male genitalia (Fig. 2) with gonostylus bearing an elongate slender posterior process [Male genitalia: BECHEV 1992a, Figs 4–5] ..... *M. collarti* (TOLLET)



Fig. 1: Male genitalia of *Macrorrhyncha laconica* spec. nov., lateral view of gonocoxites and gonostylus.

*Macrorrhyncha atticae* KURINA, 2004

**Remarks.** Distribution type 10. KURINA (2004) described this species from a single male collected in the mainland Greek province of Attiki.



**Figs 2–6:** Male genitalia of *Macrorrhyncha* species, lateral view of gonocoxites and gonostylus: – 2: *M. collarti* (TOLLET). – 3: *M. brevirostris* (LUNDSTRÖM). – 4: *M. gallica* CHANDLER & MATILE. – 5: *M. ibis* spec. nov. – 6: *M. pelargos* spec. nov.

***Macrorrhyncha brevirostris* (LUNDSTRÖM, 1911)**

(Figs 3, 7–9)

*Asindulum brevirostre* LUNDSTRÖM, 1911 (*brevioste* also given as name in error)

*Macrorrhyncha brevirostre*: MATILE, 1975 (spelling not agreeing in gender with genus)

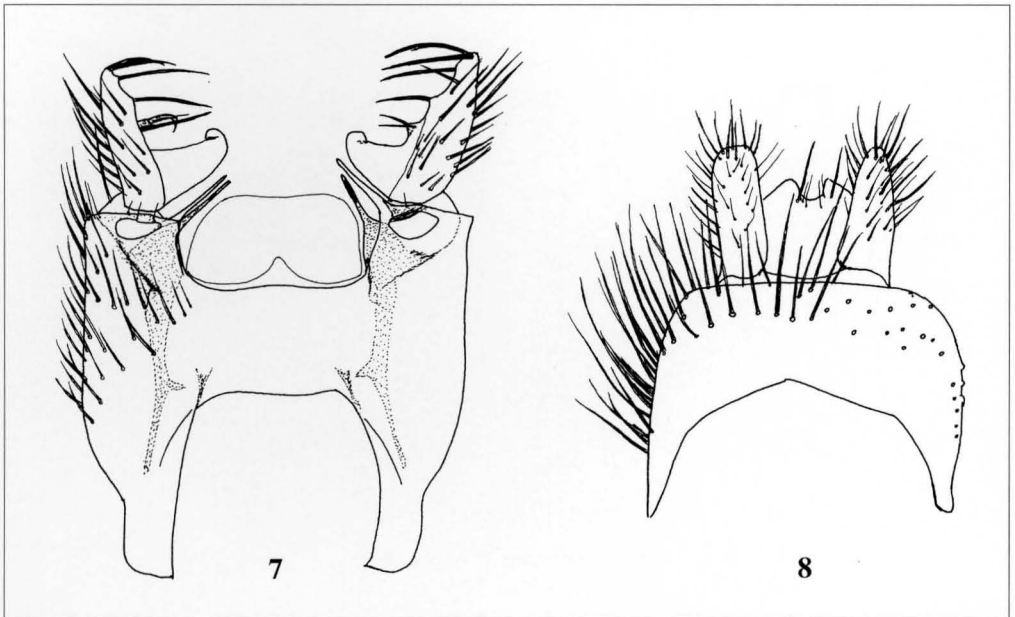
**Material.** GREECE: Cephalonia: 11, 1 ♂; 12, 1 ♂. Paxos: 2, 1 ♂.

**Male. Head** with frons yellowish brown, face yellow. Antenna shorter than thorax, with median flagellomeres less than twice as long as broad; scape, pedicel and base of first flagellomere yellow, antenna otherwise brown. Proboscis short, a quarter height of head. Palpus brown.

**Thorax** entirely brownish yellow, with three stripes on mesonotum brighter and more orange. Acrostichals biserial; dorsocentrals irregularly triserial, situated between stripes. Some posterior prospiracular setae present. Otherwise pleura and mediotergite bare. **Wing** yellowish, unmarked. Vein Sc faintly reaching costa. Vein  $R_4$  ending a little more than its length from tip of  $R_1$ . Costa extends 0.4 distance from  $R_5$  to  $M_1$ . Vein An fading apically, faintly reaching wing margin. Radiomedial fusion setose ventrally. Haltere yellow. **Wing length** 3.3–3.5 mm. **Legs** yellow, with tarsi appearing darker. Fore metatarsus 0.8 length of tibia. All setae and tibial spurs dark.

**Abdomen** with tergites 1–2 yellow, 2 faintly brown near base dorsally; 3–4 brown on basal half dorsally, the dark area contracted laterally; 5–6 progressively more broadly brown, 7 narrowly yellowish on apical margin and 8 entirely brown. Sternites 1–3 yellow, 4–5 faintly brown at base, 6–9 marked as corresponding tergites. Genitalia (Figs 3, 7–8) yellowish brown; gonocoxites joined by a broad ventral bridge and with a rounded setose lobe dorsally.





**Figs 7–8:** Male genitalia of *Macrorrhyncha brevirostris* (LUNDSTRÖM): – 7: Ventral view of gonocoxites and gonostylus. – 8: Dorsal view of tergite 9 and cerci.

**Female.** Ovipositor (Fig. 9) is drawn from a Croatian specimen (BMNH). The ovipositor of *M. gallica* CHANDLER & MATILE is figured (Fig. 10) for comparison.

**Remarks.** New to Greece. Distribution type 8. The type locality (Novi, stated to be in Hungary) was in Yugoslavia (Serbia) according to KRIVOSHEINA & MAMAEV (1988) and it has also been recorded from Croatia (COE 1962b; material in BMNH). MATILE (1975), however, considered a female from Hungary to be conspecific. The record from Corsica by MATILE (1977a) was based on *M. gallica* so it has only been confirmed from south-west Europe.

LUNDSTRÖM (1911) described this species from a single male and the material examined agrees well with the genitalia figures given by him. The specimens described here also agree with his description, repeated by MATILE, except in the entirely yellow halteres (brownish on the knob in the type) and in the extent of the abdominal markings (tergite 2 brown basally and 3–6 mainly brown with narrow yellow hind margins in the type).

#### *Macrorrhyncha geranias* (LOEW, 1869)

*Macrorrhyncha geranias thracica* BECHEV, 1997

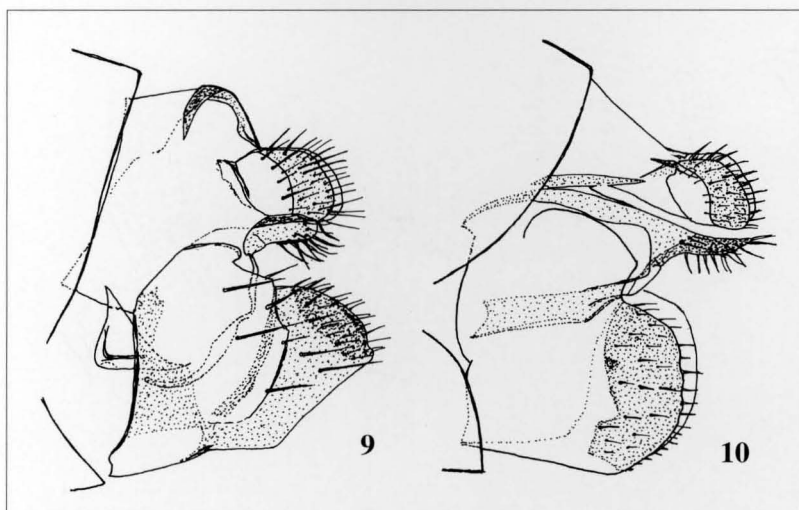
**Type material.** (subspecies *thracica*) **Holotype:** ♂, GREECE (site TR2), Rodópi: Sapka Mts, Sanda, 41°07'06"N, 25°49'43"E, 220 m, 24.v.1994, leg. I. SIVEC & B. HORVAT (SMNH). **Paratypes:** 1 ♂, 1 ♀, same data as holotype. **Other material.** GREECE: Milos: 1, 7 ♂, 1 ♀.

**Remarks.** Distribution type 10. LOEW (1869) described this species from Rhodes. The male lectotype and female paralectotype were described and figured by MATILE (1975). BECHEV (1997b) described a subspecies *thracica* from mainland Greece (Thráki), which differed in coloration of the thorax, having the lateral margin and humeral area of the mesonotum and haltere yellow while the type material had these all dark. The Milos material agrees with the type in this respect.

#### *Macrorrhyncha guichardi* CHANDLER, 1994

**Type material.** **Holotype:** ♂, CYPRUS (site 32): Dhavios, 10.iv.1971, leg. KM. GUICHARD (BMNH). **Paratypes:** 1 ♂, same data as holotype.

**Remarks.** Distribution type 9. The type material of *M. guichardi* was from Cyprus. CHANDLER (1994) also recorded it from Israel and figured the genitalia of both sexes, the female from Israeli material. The male genital structure is closest to *M. veleka* Bechev, described from Bulgaria.



**Figs 9–10:** Lateral view of ovipositors of *Macrorrhyncha* species: – **9:** *M. brevirostris* (LUNDSTRÖM). – **10:** *M. gallica* CHANDLER & MATILE.

***Macrorrhyncha ibis* spec. nov.**

(Figs 5, 11–12, 17)

**Type material.** **Holotype:** ♂, GREECE, Crete (site 19), Schisma, Elounda, 17.iv.1980, leg. A. E. STUBBS (BMNH). **Paratypes:** 9♂♂, 5♀♀, same data as holotype; 1♂, Crete, north of Rodopou (site 30), 13.v.1982, leg. I. F. G. McLEAN; 1♂, Crete, south of Rodopou, Aspra Nera crossroads (site 31), 13.v.1982, leg. I. F. G. McLEAN. **Other material.** GREECE: Crete: 52, 1♂; 55, 1♂.

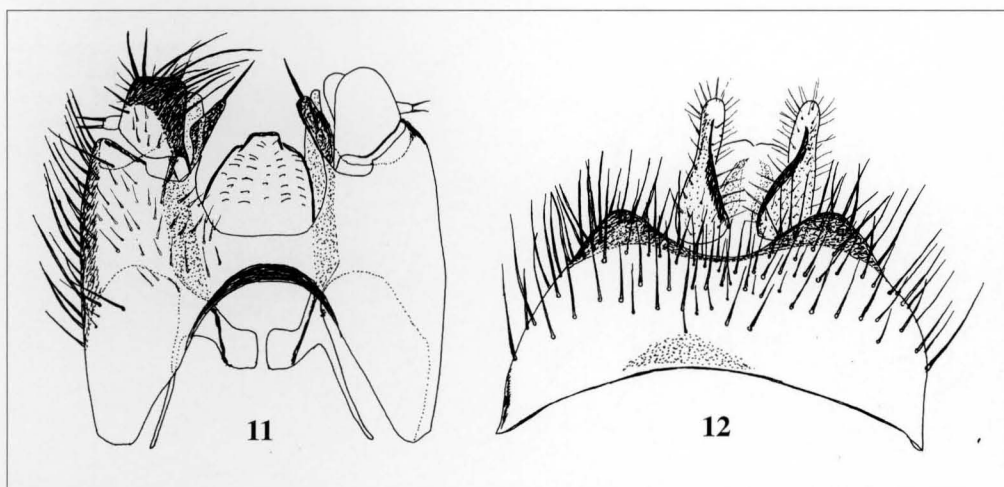
**Male.** **Head** black, grey dusted. Outer ocellus distant (about 3 times its diameter) from eye margin. Antenna about as long as thorax, with scape and pedicel appressed to head; brown with only base of first flagellomere sometimes lighter. Median flagellomeres about 1.5 times as long as broad. Face black, grey dusted, strongly produced below eyes to about a third eye-height. Proboscis as long as head; palpus slender, dark brown, nearly as long as proboscis.

**Thorax** mainly shining black, thinly grey dusted, with black bristling. Biserial acrostichals and dorso-centrals longer than the space between them; dense longer bristling laterally on mesonotum. Scutellum with several strong marginal setae. Prothorax dark brown with black bristling. A few short posterior prospiracular setae present. Pleura otherwise bare but mediotergite bears several strong upturned black setae in a median group. **Wing** yellowish, with brown veins. Vein Sc pale, ending in costa just before base of Rs. Vein  $R_4$  short, ending twice its length from tip of  $R_1$ . Costa extends 0.25–0.3 distance from  $R_5$  to  $M_1$ . Fork veins setose except at base. Vein An weakly setose, fading before reaching margin. Veins Sc, Rs and  $R_4$  bare. Radiomedial fusion setose ventrally. Haltere black, grey dusted. **Legs** mainly yellow, with dark bristling; fore and mid coxae black basally, hind coxa entirely black or brownish externally. Tibiae with irregular setulae; mid and hind tibiae with short stronger setae in irregular series, up to half tibial width in length. Tibial spurs strong and black. **Wing length** of male 3.4–4.1 mm.

**Abdomen** and genitalia (Figs 5, 11–12) entirely shining black, thinly grey dusted, with black bristling. Gonocoxites joined by a narrow bridge ventrally (Fig. 11), with a narrow apical lobe dorsally and internal process with a slender apical seta; gonostylus short with a digitate dorsal process (Fig. 5).

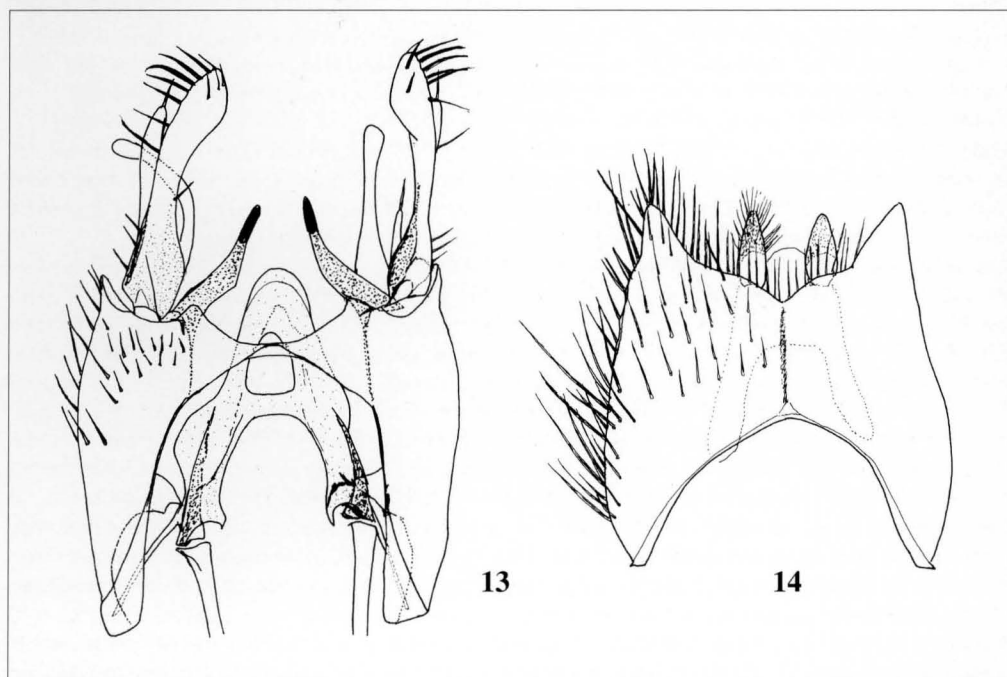
**Female.** **Head** similar to male but antenna smaller and shorter, only about two-thirds as long as thorax, with flagellomeres not much longer than broad. **Thorax** black, grey dusted, a little lighter at sides than in male, with shorter acrostichals and dorsocentrals (as long as space between them). Prothorax yellowish brown. Pleura shining dark brown, mediotergite darker. **Wing** with costa only reaching 0.2–0.25 distance from  $R_5$  to  $M_1$ . Haltere brown. **Legs** yellow, only hind coxa sometimes darker externally. **Abdomen** with tergites entirely black, sternite 1 yellow and sternites 2–6 yellow apically (observed in two examples). Ovipositor, Fig. 17. **Wing length** of female 3.5–4.9 mm.

**Etymology.** The name is a noun in apposition, alluding to the length of the proboscis and by analogy to *M. geranias* (= crane) and *M. ardea* (= heron).

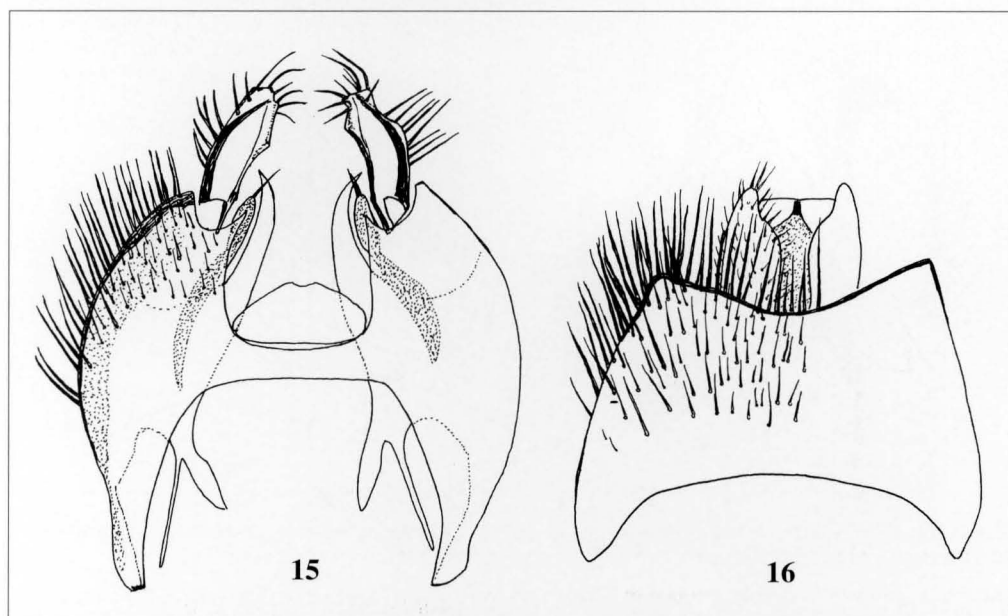


**Figs 11–12:** Male genitalia of *Macrorrhyncha ibis* spec. nov.: – 11: Ventral view of gonocoxites and gonostylus. – 12: Dorsal view of tergite 9 and cerci.

**Remarks.** Distribution type 10. In its coloration this species resembles the typical form of *M. geranias*, which is also similar in head structure. The proboscis in *geranias* is a little longer than the head with the palpi shorter than the proboscis. The venation is also similar. *M. geranias* has the abdomen entirely black in both sexes and has the mediotergite bare. *M. ibis* also differs in the structure of the gonostylus, having an elongate digitate dorsal process (as in *flava* WINNERTZ and *ancae* MATILE), absent in *M. geranias*, and a rounded distal margin where a pointed dorsal process is present in *geranias*.



**Figs 13–14:** Male genitalia of *Macrorrhyncha laconica* spec. nov.: – 13: Ventral view of gonocoxites and gonostylus. – 14: Dorsal view of tergite 9 and cerci.



**Figs 15–16:** Male genitalia of *Macrorrhyncha pelargos* spec. nov.: – **15:** Ventral view of gonocoxites and gonostylus. – **16:** Dorsal view of tergite 9 and cerci.

***Macrorrhyncha laconica* spec. nov.**

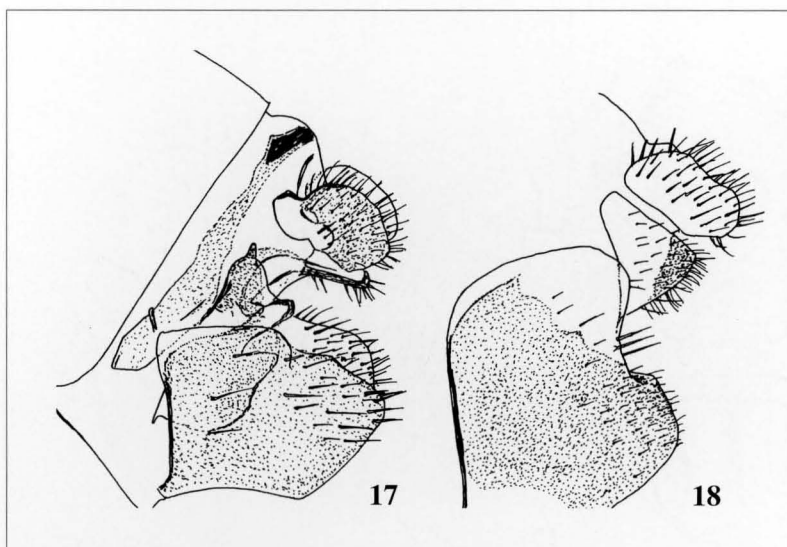
(Figs 1, 13–14)

**Type material. Holotype:** ♂, GREECE, Peloponnese (site 23), Lakonía, 5km south of Monemvasía, 18.v.1984, leg. G. CHRISTENSEN (ZMUC). **Paratypes:** 1 ♂, same data as holotype, 25.v.1984; 1 specimen (lacking abdomen), same data as holotype, 21.v.1984, leg. G. CHRISTENSEN (ZMUC); 1 ♂, GREECE, Peloponnese (site 35), Lakonía, Máni, Stoupa sl., UTM S 0612 4078, 24.v.2004, leg. D. GIBBS (PC collection).

**Male. Head** dark brown, with dark bristling; face grey dusted. Outer ocellus little more than its diameter from eye margin. Antenna brown, with base of first flagellomere paler; about as long as thorax with flagellomeres from second onwards about twice as long as broad. Face produced below eyes. Proboscis dark brown, about as long as height of head. Palpus brown, a little longer than proboscis.

**Thorax** dull brownish yellow with three indistinct slightly darker stripes on mesonotum, which bears short dark setae. Acrostichals irregularly biserial; dorsocentrals irregularly pluriserial, situated at junction between stripes and spreading onto them; longer setae on sides of mesonotum. Scutellum with a row of strong black marginal setae. Prothorax with dark bristling. Some posterior prospiracular setae present. Pleura and mediotergite bare. **Wing** unmarked, faintly yellowish. Vein Sc ends just beyond base of Rs. Vein  $R_4$  curved and ending in costa a little less than its length from the tip of  $R_1$ . Vein  $R_5$  downcurved apically. Costa extends about a third of distance from  $R_5$  to  $M_1$ . Fork veins setose except at base. Vein An weakly setose, fading before reaching margin. Veins Sc, Rs and  $R_4$  bare. Radiomedial fusion setose ventrally. Haltere yellow. **Wing length** 4.3–5.0 mm, of specimen without abdomen 4.0 mm. **Legs** entirely yellow, with dark bristling. Tibiae with irregular setulae; mid and hind tibiae with short stronger setae in irregular series, up to half tibial width in length. Mid tibia with *a*, *d* and *p-d* series on most of its length. Hind tibia with *a-d* and *d* series on most of its length and a *p* series most numerous on apical third. Tibial spurs strong and black.

**Abdomen** mainly dark brown with yellow basal markings on tergites 1–5, the basal half of the tergite laterally and interrupted dorsally on 2–4, longer laterally and forming a complete narrow basal band on 5; sternites 1–5 also with yellow basal bands, sternite 6 also yellow basally on paratype male. Genitalia (Figs 1, 13–14) dark brown, with processes of gonostylus paler. Gonocoxites joined by narrow ventral bridge (Fig. 13), with a broadly rounded dorsal lobe and elongate internal process with thick blunt



**Figs 17–18:** Lateral view of ovipositors of *Macrorrhyncha* species: – **17:** *M. ibis* spec. nov. – **18:** *M. pelargos* spec. nov.

apical seta; gonostylus deeply trilobed in lateral view with ventral lobe larger and setose, the other lobes slender with the dorsal one bent medially and with a shorter basal lobe bearing an apical seta (Fig. 1).

**Female.** Unknown.

**Etymology.** The name refers to occurrence in the province of Lakonfa, in a southern extremity of the Peloponnese.

**Remarks.** Distribution type 10. The structure of the gonostylus, with narrow elongate processes, differs markedly from other *Macrorrhyncha* species.

*Macrorrhyncha pelargos* spec. nov.

(Figs 6, 15–16, 18)

**Type material. Holotype:** ♂, GREECE, Mainland (site SE7), Fokída, Delphi, 5.v.1979, leg. A. E. STUBBS (BMNH).

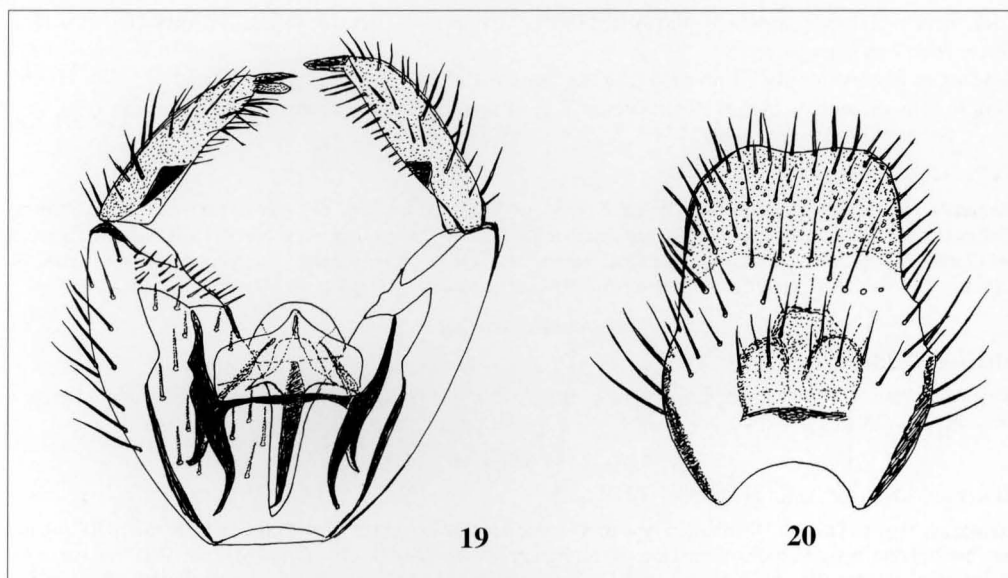
**Paratypes:** 1 ♂, Greece, Mainland (site SE6), Fokída, 1 km south-west of Amphissa, olive grove with stream, v.1979, leg. A. E. STUBBS; 1 ♀, Greece, Mainland (site SE5), Fokída, 1 km west of Eftymia, small field with trees, v.1979, leg. A. E. STUBBS.

**Male. Head** black, grey dusted. Outer ocellus twice its diameter from eye margin. Antenna shorter than thorax, with short dark hairs; scape and pedicel appressed to head, yellowish brown; flagellum dark brown, with base of first flagellomere lighter; flagellomeres only a little longer than broad. Face projecting and developed below eyes, to about a quarter eye height. Proboscis dark brown, as long as eye. Palpus dark brown, a little longer than proboscis.

**Thorax** with mesonotum yellow at sides and on humeral area, bearing three broad fused black stripes on disc; these stripes grey-dusted, with stronger dusting on acrostichal and dorsocentral rows. Scutellum yellow with dark central basal patch. Prothorax brownish yellow with dark bristling. Mesanepisternum and katepisternum shining dark brown; mesepimeron and laterotergite yellow in front, brown posteriorly; mediotergite dark brown. Acrostichal and dorsocentral setae short and biserial; longer setae on sides of mesonotum; all bristling black. Scutellum with a row of strong black marginal setae. Some posterior prospiracular setae present. Pleura and mediotergite bare. Laterotergite and mediotergite strongly projecting. **Wing** yellowish, with costa and radial veins dark brown. Vein Sc faint apically but ending in costa just beyond base of Rs. Vein  $R_4$  short, ending in costa more than twice its length from tip of  $R_1$ . Vein  $R_5$  downturned apically. Costa extends 0.2 distance from  $R_5$  to  $M_1$ . Fork veins setose except at base. Vein An weakly setose, fading before reaching margin. Veins Sc, Rs and  $R_4$  bare. Radiomedial fusion setose ventrally. Haltere yellow. **Wing length** 4.5 mm. **Legs** entirely yellow, with dark bristling; otherwise as *M. ibis*.

**Abdomen and genitalia** (Figs 6, 15–16) brown with dark bristling. Gonocoxites joined by narrow bridge ventrally, with an elongate pointed dorsal lobe and a short internal lobe bearing a slender apical seta





**Figs 19–20:** Male genitalia of *Orfelia bezzii* STROBL: – 19: Ventral view of gonocoxites and gonostylus. – 20: Dorsal view of tergite 9 and cerci (beneath tergite).

(Fig. 15); gonostylus more slender than in *M. ibis* in ventral view and longer and broader in lateral view with short dorsobasal process (Fig. 6).

**Female.** Very similar. **Thorax** with dark markings lighter (in the single specimen examined). **Wing** with costa extending 0.23 distance to  $M_1$ . **Abdomen** mainly dark brown, but tergite 1 except dorsal stripe, narrow apical margins of tergites 2–5 and sternites except basal patches on sternites 3–7 are yellow; tergites 6–7 entirely brown. Ovipositor (Fig. 18) mainly brown. **Wing length** 4.8 mm.

**Etymology.** The name is a noun in apposition, the Greek for stork, again by analogy to the above species and in respect of its coloration reflecting the origin of the word from pelos and argos (dark and light).

**Remarks.** Distribution type 10. In coloration this species resembles the mainland form of *M. geranias*.

#### *Neoplatyura nigricauda* (STROBL, 1893)

**Remarks.** Distribution type 3. This is recorded as new to Cyprus by KURINA (2004). It is widespread in Europe, including Bulgaria (BEČEV 2002a) and the Mediterranean region. CHANDLER (1994) recorded it from Israel and Tunisia.

#### *Orfelia bezzii* STROBL, 1910

(Figs 19–20)

**Type material.** **Holotype:** ♂, labelled “*Plat. minima* G. Tos. ?” by STROBL and “Typen Exemplar” by MORGE in 1961) (STROBL collection, NMBA). **Other material:** GREECE: Cephalonia: 3, 1 ♂.

**Male.** **Head** including antennae and palpi blackish brown, grey dusted. Antenna a little longer than thorax, with flagellomeres less than twice as long as broad.

**Thorax** shining black, thinly grey dusted with black bristling. Bare stripes between close-set rows of acrostichal and dorsocentral setae and lateral setae of mesonotum. Pleura and laterotergite bare. Mediotergite with several upturned setae. **Wing** yellowish tinged, with radial veins more brownish. Vein Sc ends in costa just before base of Rs. Vein  $R_4$  short, nearly vertical, ending in costa a little nearer  $R_1$  than  $R_5$ . Costa extends 0.75 distance from  $R_5$  to  $M_1$ . Radiomedial fusion short and m-Cu (base of  $M_3$ ) very short; basal part of posterior fork with parallel branches, divergent beyond middle. Fork veins without setae, Vein An short and weak. Haltere with blackish knob and lighter stem. **Wing length** of male type 2.2 mm. **Legs** with coxae shining dark brown, otherwise brownish yellow with all bristling

dark. Fore metatarsus about two-thirds length of its tibia. Tibial setulae in regular rows. Mid and hind tibiae with 2 strong spurs.

**Abdomen** dorsoventrally flattened, including genitalia (Figs 19–20) entirely shining blackish brown. Tergite 9 broad and simple, enclosing cerci (Fig. 20). Gonostylus simple, with a pair of close-set flattened internal apical setae (Fig. 19).

**Female.** Not examined.

**Remarks.** New to Greece. Distribution type 8. STROBL (1910) briefly described this species from a male from “Abbazia” (= Opatija, now in Croatia), which he had first thought to be *Platyura minima* GIGLIO-TOS, 1890, but gave the name *bezzii* after Mario BEZZI had informed him that *minima* was a larger paler species. The holotype (so designated by MORGE 1984) has been examined and is described above. The male from Cephalonia is considered conspecific.

### *Orfelia fasciata* (MEIGEN, 1804)

**Material.** CYPRUS: 35, 1♂.

**Remarks.** New to Cyprus. Distribution type 4. This species is recorded throughout Europe, including Bulgaria (BECHEV 2002a).

### *Orfelia gruevi* BECHEV, 2002

**Material.** GREECE: Corfu: 21, 2♂♂.

**Remarks.** New to Greece. Distribution type 8. This species was described from Bulgaria by BECHEV (2002b) and has not hitherto been recorded elsewhere. In coloration it resembles *O. discoloria* (MEIGEN, 1818) as stated by BECHEV (*op. cit.*) but the gonostylus although bilobed is single as in *O. bezzii*, *O. bicolor* (MACQUART), *O. nemoralis* (MEIGEN) and *O. pallida* (STAEGER) rather than the two basally separate lobes found in *O. discoloria*, *O. fasciata*, *O. tristis* (LUNDSTRÖM) and *O. unicolor* (STAEGER).

### *Orfelia tristis* (LUNDSTRÖM, 1911)

**Material.** GREECE: Mainland: IP4, 1♂. MK18; MK26; TR4. Peloponnese: 17, 1♀; 22, 1♂.

**Remarks.** New to Greece. Distribution type 4. This species is widespread but local in Europe, including Bulgaria (BECHEV 2002a).

### *Orfelia unicolor* (STAEGER, 1840)

**Material.** GREECE: Mainland: MK8, 2♂♂. Peloponnese: 25, 1♂.

**Remarks.** New to Greece. Distribution type 2. This species is also widely distributed in the Palaearctic, including Azerbaijan and the Far East of Russia (ZAITZEV 1994 and 1999b).

### *Platyura marginata* MEIGEN, 1804

**Material.** GREECE: Mainland: TH5. Peloponnese: 30, 2♂♂; 31, 1♂; 33, 2♂♂; 34, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a Palaearctic species, widespread in Europe and extends to the Far East of Russia (ZAITZEV 1999b). It is usually found amongst low vegetation in broad-leaved woodland.

### *Pyratula oracula* CHANDLER, 1994

**Type material.** Holotype♂, GREECE, Fokis, Delphi, 5.v.1979, leg. A.E. STUBBS (BMNH). **Other material (including paratypes).** GREECE: Mainland: TR5; TH6, 1♂. Corfu: 12, 1♂. Milos: 1, 1♂. Crete: 30, 1♂. CYPRUS: 19, 1♂; 38, 1♂, 2♀♀; 41, 2♂♂; 42, 2♂♂; 43, 1♀.

**Remarks.** Distribution type 6. The type material of *P. oracula* was from several parts of Greece and Cyprus; at the same time it was recorded from Israel (CHANDLER 1994). It has since been recorded from Andorra and Switzerland (CHANDLER & BLASCO-ZUMETA 2001) so is evidently widespread in southern Europe.

### *Pyratula takkae* CHANDLER, 2001

**Type material.** Holotype: ♂, GREECE: Peloponnese (site 6), Arkadía, south-west of Lake Takka, 27.iv.1979, shaded stream from spring, leg. A. E. STUBBS (BMNH).

**Remarks.** Distribution type 10. This species remains known only from the Greek holotype.

### *Rutylapa ruficornis* (ZETTERSTEDT, 1851)

**Material.** GREECE: Mainland: IP3, 1♂.

**Remarks.** Distribution type 3. This is widespread but uncommon in Europe. CHANDLER (1994) mentioned that it occurred in mainland Greece and recorded it from Israel.

## Subfamily Macrocerinae

### *Macrocera aegaea* MATILE, 1969

**Remarks.** Distribution type 10. This species remains known from the type male from Lesbos. According to the description by MATILE (1969a) it resembles *M. aquabellissima* CHANDLER, *M. levantina* CHANDLER and the species discussed below under *M. critica* spec. nov., in having unmarked wings bearing macrotrichia on the membrane and  $R_1$  not thickened apically. The gonostylus differs from these species in being broad and blunt ended without any teeth; the genitalia were figured only in ventral view and the form of tergite 9, cerci and aedeagus was not described.

### *Macrocera anglica* EDWARDS, 1925

**Material.** GREECE: Corfu: 2, 1♂.

**Remarks.** Distribution type 4. MARTINOVSKÝ (2001) recorded this species from Corfu and the Greek mainland (Thessalia). It is widespread in forest habitats in Europe including Bulgaria (BECHEV 2002a).

### *Macrocera aquabellissima* CHANDLER, 1994

**Material.** GREECE: Crete: 51, 1♂. CYPRUS: 11, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 9. CHANDLER (1994) described this species from a single male collected in Israel, and figured the very distinct genitalia, with which the specimens from Crete and Cyprus agree well. The gonostylus has a rounded dorsal lobe but a strong distal tooth, tergite 9 is enlarged and the aedeagus strongly sclerotised.

### *Macrocera centralis* MEIGEN, 1818

**Material.** GREECE: Mainland: MK12, 1♂; SE7, 2♂♂; SE9, 1♀; SE12, 1♂. Peloponnese: 1, 1♂; 2; 5, 1♂; 15, 1♀; 29, 1♂; 31, 1♂; 32, 1♀; 34, 1♂. Cephalonia: 4, 3♀♀; 7, 1♂, 1♀; 10, 1♂. Crete: 27, 1♀.

**Remarks.** New to Greece. Distribution type 2. Widespread and common in the Palaearctic, including the Mediterranean region and Caucasus (JOOST & PLASSMANN 1976).

### *Macrocera crassicornis* WINNERTZ, 1863

**Material.** GREECE: Mainland: SE7, 1♂, 1♀. Peloponnese: 7; 26, 1♀. Cephalonia: 5, 1♂, 1♀; 10, 1♀. Corfu: 8, 2♂♂, 2♀♀; 12, 1♀. Euboa: 1, 2♂♂. Crete: 2, 1♂; 18, 1♂; 20, 1♂; 26, 1♂; 27, 1♂; 37, 1♀; 41, 1♂; 51, 2♂♂.

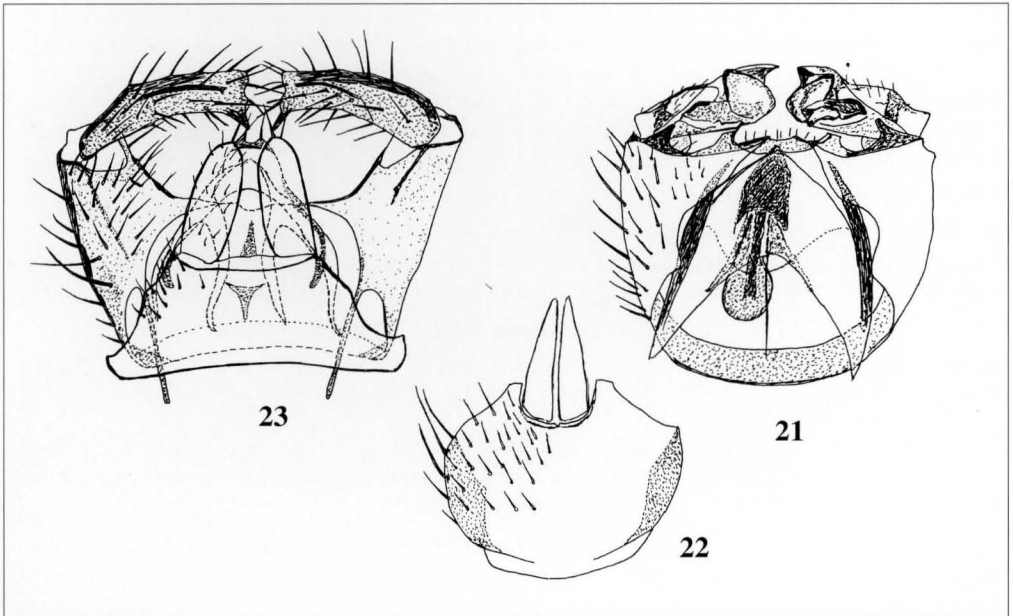
**Remarks.** Distribution type 3. A widespread western Palaearctic species, recorded widely in Europe and from Morocco, Israel, Turkey and Afghanistan (CHANDLER 1994) and Armenia (ZAITZEV 1994). CHANDLER (1994) cited the records from Cephalonia, Corfu, Euboa and Crete.

### *Macrocera critica* spec. nov.

(Figs 21–22)

**Type material.** **Holotype:** ♂, GREECE, Crete (site 20), Kritsa, rocky valley, 16.iv.1980, leg. A. E. STUBBS (BMNH).

**Male.** **Head** dark brown, with black bristling. Ocellar triangle broad, with outer ocellus about its diameter from eye margin. Frons with transverse furrow between upper corners of eyes and median furrow to base of antennae. Antenna brown, with scape and pedicel shorter than broad; basal flagellomere 8 times as long as broad, succeeding flagellomeres successively shorter and more slender (antennae incomplete but one antenna has 13 flagellomeres present and is 3.5 mm in length). Palpus short, yellow. **Thorax** with mesonotum broadly yellow at sides and on humeral area, bearing three shining dark brown stripes, narrowly separated by uniserial rows of short dark dorsocentral setae; acrostichals absent, long dark setae on sides of mesonotum. Prothorax and mesepimeron yellow; flat notopleural flange, mesanepisternum, katepisternum, discs of scutellum, laterotergite and mediotergite brown. Prothorax with dark setae. Two short black setae near upper margin of mesanepisternum. Pleura and mediotergite otherwise bare. **Wing** clear, with macrotrichia distributed over most of its membrane, but cells c and sc bare. Vein Sc ending in costa well beyond level of base of Rs. Vein  $R_1$  not enlarged apically, just slightly broader at tip. Vein  $R_4$  curved and ending in costa its length beyond  $R_1$ . Vein  $R_5$  close to costa apically. Costa extends 0.25 distance from  $R_5$  to  $M_1$ . Vein An reaches margin. All veins setulose including Sc, Rs,  $R_4$  and faint base of M. Haltere brownish yellow. **Wing length** 3.7 mm. **Legs** long and slender, with short dark bristling; yellow including fore coxa; mid and hind coxa dark brown. Fore metatarsus two-thirds length of its tibia. Tibial spurs yellow, those on mid and hind legs nearly twice as long as apical width of tibia.



**Figs 21–23:** Male genitalia of *Macrocera* species: – 21–22: *M. critica* spec. nov. – 21: Dorsal view of gonocoxites, gonostylus and aedeagal complex with tergite 9 and cerci removed. – 22: Dorsal view of tergite 9 and cerci. – 23: *M. cypriaca* spec. nov., dorsal view.

**Abdomen** brown, with dark bristling. Genitalia (Figs 21–22) brown. Tergite 9 rounded; cerci elongate and tapered (Fig. 22). Gonostylus without apical teeth, but with a tooth-like outer lobe and bluntly rounded inner lobe; aedeagus strongly sclerotised (Fig. 21).

**Female.** Unknown.

**Etymology.** The name is an adjective referring to occurrence in Crete.

**Remarks.** Distribution type 10. *Macrocera critica* resembles several other Mediterranean species in having relatively complex genitalia, with a large tergite 9, tapered cerci and more or less sclerotised aedeagus. Species of this group have unmarked wings with macrotrichia on the membrane and longer tibial spurs than is typical for the genus. Within this group the form of the gonostylus is closest to *M. gemaea* BECHEV (Bulgaria; BECHEV 1991), *M. buskettina* CHANDLER & GATT (Malta) and *M. jonica* MARTINOVSKÝ (Corfu). *M. jonica* differs in being mainly yellow with basal brown bands on tergites 1–5; *M. gemaea* and *M. buskettina* have a similarly banded abdomen but dark stripes are also present on the thorax.

***Macrocera cypriaca* spec. nov.**

(Fig. 23)

**Type material.** **Holotype:** ♂, CYPRUS (site 16), Prodhromus, pine forest, 3.v.1982, leg. A. E. STUBBS (BMNH).

**Male.** **Head** shining brown, thinly grey dusted. Ocelli in a small equilateral triangle, outer ocellus more than twice its diameter from eye margin. Frons with a transverse furrow below ocelli and a median furrow to base of antennae. Antenna with scape and pedicel upturned, about as long as broad; flagellum twice as long as body with flagellomeres 1–3 about 10 times as long as broad, flagellomeres 4 onwards longer and narrower, with short dark hairs. Proboscis and palpi missing from specimen.

**Thorax** all shining brown, with thin lines of grey dusting along uniserial rows of short dorsocentral setae; acrostichals absent, long setae on sides of mesonotum. Prothorax with dark bristling. A small group of short black setae near upper margin of mesanepisternum. Pleura and mediotergite otherwise bare. **Wing** clear greyish, without macrotrichia on membrane. Vein Sc ends in costa distinctly beyond base of Rs. Vein  $R_1$  swollen near tip and ending at about two-thirds of wing length. Vein  $R_4$  straight, diagonal and reaching costa half its length from  $R_1$ . Vein  $R_5$  close to costa apically. Costa reaches 0.6 distance from  $R_5$  to  $M_1$ .

Setulae present on  $R_1$ ,  $R_5$  beyond r-m fusion and sparsely on fork veins. Haltere missing from specimen. **Wing length** 3.8 mm. **Legs** relatively short, bearing short dark bristling. Fore metatarsus about half length of its tibia. Tibial spurs on mid and hind legs about as long as apical tibial width.

**Abdomen** shining brown, thinly grey dusted, with dark bristling. Genitalia (Fig. 23) brown; tergite 9 broad basally, cerci relatively broad and rounded apically; gonostylus narrow, blunt ended with one internal apical tooth; aedeagus weakly sclerotised.

**Female.** Unknown.

**Etymology.** The name is an adjective referring to occurrence in Cyprus.

**Remarks.** Distribution type 10. This species is more typical of *Macrocera* than the species discussed under *M. critica* in its genital structure but differs from most species of the genus in having only a single apical tooth to the gonostylus.

### *Macrocera fasciata* MEIGEN, 1804

**Material.** GREECE: Mainland: MK5, 1 ♀; SE9, 1 ♂. Peloponnese: 6, 1 ♀; 5, 1 ♂, 1 ♀. Crete: 27, 1 ♂, 1 ♀; 29, 1 ♂; 37, 1 ♂; 41, 1 ♂; 43, 4 ♂♂, 1 ♀; 51, 1 ♀; 55, 1 ♂. CYPRUS: 10, 1 ♀; 11, 2 ♀♀; 14, 1 ♀; 16, 1 ♂; 21, 1 ♀; 26, 1 ♂; 49, 1 ♀; 52, 1 ♂.

**Remarks.** Distribution type 2. A Palearctic species, widespread in Europe and also known from the Canary Islands and North Africa (CHANDLER & RIBEIRO 1995), Malta (CHANDLER & GATT 2000), Israel (CHANDLER 1994) and Oman (CHANDLER 2000). CHANDLER (1994) referred to occurrence in Crete and Cyprus.

### *Macrocera incompleta* BECKER, 1908

**Material.** GREECE: Crete: 18, 1 ♂; 43, 1 ♀.

**Remarks.** New to Greece. Distribution type 7. The synonymy of this species was discussed by CHANDLER & RIBEIRO (1995), who recorded it from the Canary Islands and Corsica

### *Macrocera jonica* MARTINOVSKÝ, 2001

**Material.** GREECE: Corfu: 12, 2 ♂♂; 18, 2 ♂♂.

**Remarks.** Distribution type 10. This species was described from a single male collected in Corfu. Four further males from two sites on this island have been examined. These specimens (wing length 3.7–4.1 mm) agree well with the description and figures given by MARTINOVSKÝ.

### *Macrocera kerteszi* (LUNDSTRÖM, 1911)

**Remarks.** Distribution type 8. MARTINOVSKÝ (2001) recorded this species from the Greek mainland (Makedonia, Chalkidiki) and referred to previous records from Rumania (LUNDSTRÖM 1911) and Bulgaria (BECHEV 1996). It remains unknown outside the Balkans.

### *Macrocera levantina* CHANDLER, 1994

**Remarks.** Distribution type 6. This was recorded as new to the mainland of Greece by KURINA (2004). It is evidently a widespread Mediterranean species, described from Israel and since recorded from Algeria (MARTINOVSKÝ 2001) and Portugal (RIBEIRO & CHANDLER in preparation).

### *Macrocera nigricoxa* WINNERTZ, 1863

**Material.** GREECE: Mainland: AT1, 1 ♂. Peloponnese: 6, 1 ♀. Euboa: 3, 1 ♂. Lesbos: 1, 1 ♀. Samos: 1, 1 ♂. Crete: 18, 1 ♂; 23, 2 ♂♂; 27, 2 ♂♂; 29, 3 ♀♀; 35, 1 ♂; 41, 4 ♂♂; 53, 1 ♂. CYPRUS: 1, 1 ♂; 18, 1 ♀; 21, 1 ♂; 38, 1 ♂; 48, 1 ♂; 49, 1 ♂.

**Remarks.** Distribution type 3. This is a western Palearctic species, widespread in Europe, also recorded from Israel (CHANDLER 1994), Oman (CHANDLER 2000) and Tadzhikistan (ZAITZEV 1994). CHANDLER (1994) also referred to its occurrence in mainland Greece, Corfu, Euboa, Lesbos, Samos, Crete and Cyprus.

### *Macrocera parcehirsuta* BECKER, 1908

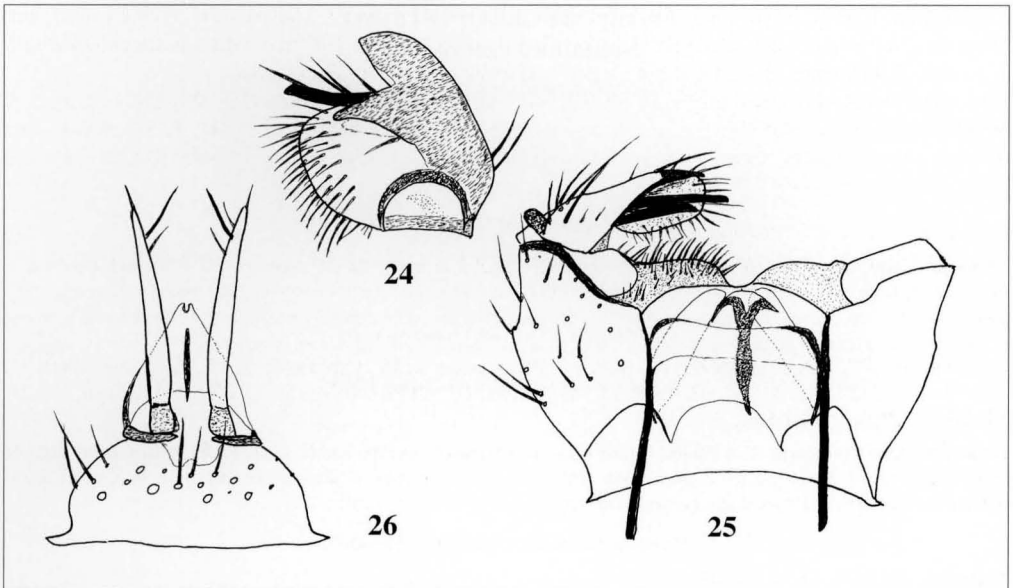
**Material.** CYPRUS: 51, 1 ♀.

**Remarks.** New to Cyprus. Distribution type 6. This is a Mediterranean species, described from Algeria and since recorded from Israel (CHANDLER 1994), Malta (CHANDLER & GATT 2000), Spain and the Balearic Islands (CARLES-TOLRÁ 2002).

### *Macrocera phalerata* MEIGEN, 1818

**Material.** GREECE: Mainland: IP1, 1 ♂. Euboa: 2, 1 ♂.





**Figs 24–26:** Male genitalia of *Macrocera sinaitica* CHANDLER (Cyprus): – 24: Dorsal view of gonocoxites, gonostylus and aedeagal complex with tergite 9 and cerci removed. – 25: Internal view of left gonostylus. – 26: Tergite 9 and cerci.

**Remarks.** Distribution type 3. This is widespread in Europe and the Mediterranean region, including North Africa (Tunisia), Israel and Iran (CHANDLER 1994). CHANDLER & GATT (2000) recorded it from Malta. CHANDLER (1994) mentioned that there was a record from Euboa.

***Macrocera pusilla* MEIGEN, 1830**

**Material.** GREECE: Peloponnese: 23, 21.vi.1984, 1♂.

**Remarks.** New to Greece. Distribution type 3. A widespread European species. ZAITZEV (1994) recorded it from Tadzhikistan and CHANDLER (1994) referred to records from Iraq, Egypt and Tunisia.

***Macrocera sinaitica* CHANDLER, 1994**

(Figs 24–26)

**Material.** CYPRUS: 40, 1♂; 45, 1♂.

**Remarks.** New to Cyprus. Distribution type 9. This species is only previously known from the holotype male from Egypt (Sinai) (CHANDLER 1994). The specimens from Cyprus have some differences in the structure of the genitalia (Figs 24–26), with the cerci more tapered and the internal prong of the gonostylus longer and blunter, but these are not considered of a specific nature pending the discovery of other material, the form of the gonostylus and the sclerotised aedeagal apodeme being characteristic.

***Macrocera stigma* CURTIS, 1837**

**Material.** GREECE: Mainland: MK11, 1♀.

**Remarks.** New to Greece. Distribution type 4. A widespread European species.

***Macrocera stigmoides* EDWARDS, 1925**

**Material.** GREECE: Peloponnese: 34, 1♂. Crete: 27, 1♂.

**Remarks.** New to Greece. Distribution type 3. A widespread European species, extending to the Altai (ZAITZEV 1994) and there is an unpublished record from Turkey.

***Macrocera vittata* MEIGEN, 1830**

**Material.** GREECE: Peloponnese: 15, 1♂; 17, 1♂; 28, 1♀. Naxos: 1, 1♀.

**Remarks.** Distribution type 4. A widespread European species, including the western part of the Mediterranean region. CHANDLER (1994) mentioned occurrence in mainland Greece and Naxos.

**Family MYCETOPHILIDAE**

**Subfamily Gnoristinae**

***Apolephthisa subincana* (CURTIS, 1837)**

**Material.** GREECE: Mainland: MK23.

**Remarks.** New to Greece. Distribution type 3. This is widespread in Europe and also recorded from the Caucasus (JOOST & PLASSMANN 1976; ZAITZEV 1994).

***Boletina anderschi* (STANNIUS, 1831)**

**Material.** GREECE: Mainland: MK11, 2♀♀. Pelopponese: 6, 1♀. Crete: 47, 1♂, 3♀♀. CYPRUS: 3, 3♂♂; 11, 1♀; 14, 2♀♀; 17, 1♂, 2♀♀; 18, 10♂♂, 2♀♀; 21, 1♂, 1♀; 37, 2♂, 2♀♀; 49, 1♀; 53, 1♂, 1♀; 56, 2♂♂.

**Remarks.** New to Greece. Distribution type 3. This species is found in central Europe and the Balkans. CHANDLER (1994) recorded it from Israel and mentioned that material from Cyprus had been examined.

***Boletina dispecta* DZIEDZICKI, 1885**

**Material.** GREECE: Mainland: SE9, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species, reaching the Far East of Russia (ZAITZEV 1999b). ZAITZEV et al. (2005) indicate confusion with *B. bidenticulata* SASAKAWA & KIMURA, 1974 so identity of the Greek specimen requires confirmation.

***Boletina dubia* (MEIGEN, 1804)**

**Material.** GREECE: Mainland: IP3, 2♂♂. Pelopponese: 16, 1♂. Crete: 3, 2♂♂; 10, 1♀; 31, 2♂♂; 58, 2♂♂; 59, 1♂; 62, 2♂♂.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in Europe.

***Boletina gripha* DZIEDZICKI, 1885**

**Material.** GREECE: Mainland: MK11, 1♂, 2♀♀. Pelopponese: 19, 1♂; 21, 1♂. Corfu: 10, 2♂♂; 21, 1♂. Crete: 42, 1♂. CYPRUS: 4, 3♂♂; 11, 1♂; 22, 5♀♀; 27, 1♂; 28, 4♀♀; 30, 2♂♂, 1♀.

**Remarks.** Distribution type 2. A common and widespread Palaearctic species (ZAITZEV 1999b). It was recorded from the Canary Islands by CHANDLER & RIBEIRO (1995) and Israel by CHANDLER (1994), who also referred to its occurrence in Cephalonia, Corfu and Cyprus.

***Boletina griphoides* EDWARDS, 1925**

**Material.** GREECE: Crete: 1, 2♂♂, 1♀.

**Remarks.** New to Greece. Distribution type 4. A widespread European species.

***Boletina sciarina* STAEGER, 1840**

**Material.** GREECE: Cephalonia: 20, 2♂♂. Crete: 48, 1♂.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species (ZAITZEV 1999b), which is widely distributed in Europe, including Bulgaria (BECHEV 2002a).

***Coelosia flava* (STAEGER, 1840)**

**Material.** GREECE: Mainland: MK20.

**Remarks.** New to Greece. Distribution type 4. It is also widespread in Europe, including Bulgaria (BECHEV 2002a).

***Coelosia fusca* BEZZI, 1892**

**Material.** GREECE: Pelopponese: 23, 2♀♀. CYPRUS: 3, 3♂♂; 4, 3♂♂; 22, 2♂♂, 1♀; 27, 1♂; 28, 1♂; 30, 2♂♂; 54, 1♂.

**Remarks.** Distribution type 3. This species is widespread in western and central Europe and is also known from the Canary Islands (CHANDLER & RIBEIRO 1995) and Israel (CHANDLER 1994). CHANDLER (*op. cit.*) referred to its presence in mainland Greece, Corfu and Cyprus.

***Ectrepesthoneura chandleri* CASPERS, 1991**

**Type material. Holotype:** ♂, GREECE, Crete, Kakopetros, 490 m, 20.ii.1982, leg. H. MALICKY (ZSM). **Other material.** GREECE: Crete: 38, 1♂; 43, 1♀. CYPRUS: 16, 1♂, 1♀; 20, 1♀; 38, 1♂; 54, 1♀.

**Remarks.** Distribution type 10. CASPERS (1991) described this species from Crete and also cited it from Cyprus. Additional material from Cyprus is reported here.

*Ectrepesthoneura ledenikiensis* BECHEV, 1988

**Remarks.** Distribution type 8. KURINA (2004) recorded this as new to mainland Greece. It was previously known only from the Bulgarian holotype.

*Ectrepesthoneura pubescens* (ZETTERSTEDT, 1840)

**Material.** GREECE: Mainland: MK25.

**Remarks.** New to Greece. Distribution type 4. It is widespread but uncommon in northern and central Europe.

*Phoenikiella phoenix* (VÄISÄNEN, 1984)

**Material.** GREECE: Peloponnese: 23, 10.xii.1983, 1 ♀; 23, 23.xii.1983, 1 ♀.

**Remarks.** New to Greece. Distribution type 6. This is a Mediterranean species, previously known from Tunisia (VÄISÄNEN 1984b), Malta (CHANDLER & GATT 2000) and Israel (CHANDLER 1994). CHANDLER (1998) transferred it from *Grzegorzekia* to the new genus *Phoenikiella*.

*Synapha fasciata* MEIGEN, 1818

**Material.** GREECE: Mainland: IP5, 3 ♂♂, 1 ♀; MK26; SE9, 1 ♀; SE13, 1 ♂. Peloponnese: 18, 1 ♂; 23, 2 ♂♂. Cephalonia: 8, 1 ♂. Corfu: 17, 1 ♀; 19, 2 ♂♂. Euboa: 1, 14 ♂♂, 1 ♀; 3, 1 ♂; 4, 1 ♂. Lesbos: 3, 1 ♂. Samos: 1, 14 ♂♂, 2 ♀♀. Crete: 3, 1.x.1972, 10 ♂♂, 2 ♀♀; 3, 20.v.1977, 13 ♂♂; 3, 13.v.1979, 7 ♂♂; 7, 1 ♂; 9, 64 ♂♂, 11 ♀♀; 10, 23.v.1977, 1 ♂; 10, 18.v.1979, 1 ♂; 11, 4 ♂♂, 2 ♀♀; 12, 1 ♀; 33, 2 ♂♂; 36, 1 ♂; 56, 1 ♂; 60, 29 ♂♂, 1 ♀; 62, 2 ♂♂; 63, 8 ♂♂. CYPRUS: 5, 6 ♂♂; 11, 1 ♀; 12, 1 ♂; 18, 1 ♀; 26, 1 ♀.

**Remarks.** New to Greece and Cyprus, but evidently a common species in this region. Distribution type 4. It is widespread in Europe including the Mediterranean parts. COE (1962b) recorded it from Macedonia in the former Yugoslavia.

*Synapha vitripennis* (MEIGEN, 1818)

**Material.** GREECE: Peloponnese: 2, 1 ♂.

**Remarks.** New to Greece. Distribution type 4. This is a widespread European species.

*Syntemna hungarica* (LUNDSTRÖM, 1912)

**Material.** GREECE: Cephalonia: 10, 1 ♂.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species (POLEVOI 2003), which is more widespread in Europe than most species of this mainly boreal genus.

*Tetragoneura ambigua* GRZEGORZEK, 1985

**Material.** GREECE: Corfu: 10, 1 ♂.

**Remarks.** New to Greece. Distribution type 5. This is a central and southern European species, recorded from Bulgaria (BECHEV 2002a). CHANDLER (1995) figured the male genitalia from a Slovakian specimen and mentioned that a Greek male had different genitalia, but this is now considered to be in error due to a genitalia preparation not being correctly associated.

## Subfamily Leiinae

*Docosia carbonaria* EDWARDS, 1941

**Material.** GREECE, Corfu: 14, 1 ♂. Cephalonia: 10, 2 ♂♂.

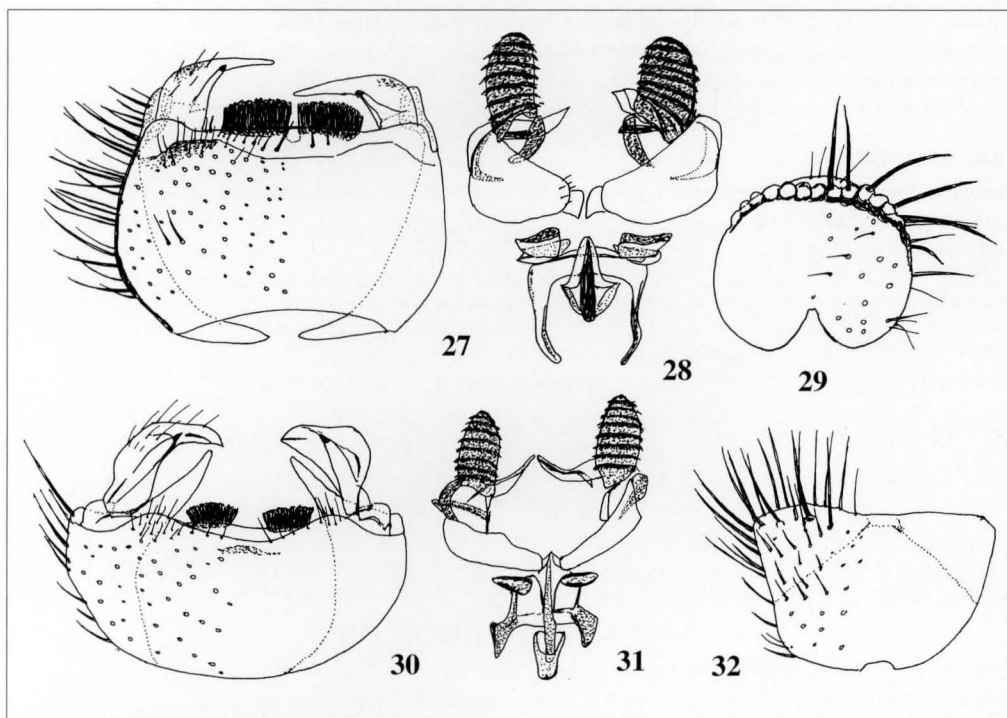
**Remarks.** New to Greece. Distribution type 4. This species is widespread in Europe. The Greek specimens have the leg coloration paler than specimens from northern Europe: coxae all black; femora widely black apically (to apical third on hind femur) and on dorsal and ventral margins; tibiae with a dark streak dorsally, legs otherwise dark yellow. The genitalia are similar structurally to British specimens of *D. carbonaria* Edwards, which differ in having the hind femur entirely black.

*Docosia cephaloniae* spec. nov.

(Figs 27–29)

**Type material. Holotype:** ♂, GREECE, Cephalonia (site 10), Mt Enos, 1000 m, dry gully, 20.v.1981, leg. I. F. G. McLEAN (BMNH).

**Male. Head** black, with white bristling. Outer ocellus close to eye margin. Antenna black, about as long as thorax, with median flagellomeres about twice as long as broad; a long dorsal seta on pedicel. Palpus brownish yellow.



**Figs 27–32:** Male genitalia of *Docosia* species: – 27–29: *D. cephaloniae* spec. nov. – 27: Ventral view of gonocoxites and gonostyli. – 28: Cerci (above) and aedeagal complex. – 29: Dorsal view of tergite 9. – 30–32: *D. melita* CHANDLER & GATT (Corfu). – 30: Ventral view of gonocoxites and gonostyli. – 31: Cerci (above) and aedeagal complex. – 32: Dorsal view of tergite 9.

**Thorax** black, thinly grey dusted, with all bristling on mesonotum, scutellum and prothorax white. Pleura and laterotergite bare. **Wing** as other species. Costa extends 0.5 distance from  $R_5$  to  $M_1$ . Haltere yellow. **Wing length** 2.7 mm. **Legs** yellow, including all coxae; only hind femur brown on apical quarter. Coloration of leg bristling and proportions of fore leg as in *D. enos* spec. nov. Mid tibia with 4 *a* and 5–6 *p-d* setae. Hind tibia with 11 *a* (shorter in middle of series) and 9–10 *d* (longer in middle of series) setae. **Abdomen** black, with pale hairs except on tergite 9 and genitalia (Figs 27–29), which bear dark setae. Gonocoxites with pair of apical combs of thickened setae large and narrowly separated; gonostylus bilobed with ventral lobe short and slender (Fig. 27).

**Female.** Unknown.

**Etymology.** The specific name is the genitive of the island of Cephalonia.

**Remarks.** Distribution type 10. This may, as discussed under *D. melita* represent a local form of that species but the differences in genital structure are considered sufficient to give it specific rank.

***Docosia enos* spec. nov.**

(Figs 33–35)

**Type material. Holotype:** ♂, GREECE, Cephalonia (site 4), Mt Enos, 1630 m, *Abies* forest, 18.v.1981, leg. I. F. G. McLean (BMNH).

**Male. Head** black with white bristling. Outer ocellus close to eye margin. Antenna black with white hairs, distinctly longer than head and thorax, with median flagellomeres about 3 times as long as broad. palpus black.

**Thorax** black, thinly grey dusted with all setae including strong scutellars white. Prothorax with white setae. Pleura and laterotergite bare. **Wing** colourless, with costa, radial veins and r-m dark brown. Costa

extends 0.4 distance from  $R_5$  to  $M_1$ . Setulae on veins including basal part of Sc and r-m, but not tb or stalk of median fork. Haltere yellow. **Wing length** 4.0 mm. **Legs** mainly yellow: coxae black basally, obscurely yellow on apical half (especially on internal face); femora darkened on ventral margin and hind femur at tip; tibiae with dark dorsal streak; tarsi brownish. Coxae and femora with white bristling. Tibiae and tarsi with black setae and setulae, tibial spurs yellow. Mid tibia with 5 *a* and 5 *p-d* setae, 3 short *p* setae near tip. Hind tibia with 13 *a* and 9 stronger *d* with some shorter more close-set *d* near tip. Fore tarsus elongate; metatarsus equal to two-thirds length of its tibia and to tarsomeres 2–4 together.

**Abdomen** black, with pale hairs except for tergite 9 and genitalia (Figs 33–35), which bear dark setae. Gonocoxites with irregular thick setae on apical internal margin, not forming distinct combs and an elongate process immediately dorsal to the gonostylus; gonostylus with elongate dorsal lobe and two short ventral lobes, each bearing short strong apical seta (Fig. 33).

**Female.** Unknown.

**Etymology.** The specific name is based on the type locality and is a noun in apposition.

**Remarks.** Distribution type 10. This species has genitalia similar in structure to *D. carbonaria* but the gonostylus has an additional lobe bearing a thickened seta and the process of the gonocoxites present external to the gonostylus is more elongate.

### *Docosia gilvipes* (HALIDAY, 1856)

**Material.** GREECE: Mainland: MK2, 1 ♀. Corfu: 5, 1 ♀; 9, 1 ♂, 1 ♀. Crete: 20, 1 ♀.

**Remarks.** New to Greece. Distribution type 2. It is widely distributed in the Palaearctic Region, reaching Japan (ZAITZEV 1999b). There are also records from Madeira (CHANDLER & RIBEIRO 1995) and Israel (CHANDLER 1994).

### *Docosia lastovkai* CHANDLER, 1994

**Material.** GREECE: Crete: 20, 1 ♂, 1 ♀; 23, 1 ♂; 24, 1 ♂; 29, 2 ♂♂, 3 ♀♀.

**Remarks.** Distribution type 3. Although this species was described from Israeli material, CHANDLER (1994) stated that specimens had been examined from Crete, Rumania and Bulgaria and it has since been recorded from central Europe. KURINA (2004) recorded it from Kos.

### *Docosia melita* CHANDLER & GATT, 2000

(Figs 30–32)

**Material.** GREECE: Corfu: 12, 7 ♂♂.

**Remarks.** New to Greece. Distribution type 6. This species was described from Malta but it was known to correspond to one of the new species recognised in the unpublished revision of the genus by Petr LAŠTOVKA. The genitalia of the Corfu specimens (Figs 30–32) are figured as they have the combs within the gonocoxal margin larger (Fig. 30) than in the Maltese material figured by CHANDLER & GATT (2000), perhaps a step towards the condition in the form from Cephalonia described above.

### *Docosia pasiphae* spec. nov.

(Figs 36–39)

**Type material.** **Holotype:** ♂, GREECE, Crete (site 20), Kritsa, rocky valley, 18.iv.1980, leg. A. E. STUBBS (BMNH).

**Paratypes:** 1 ♂, same data as holotype.

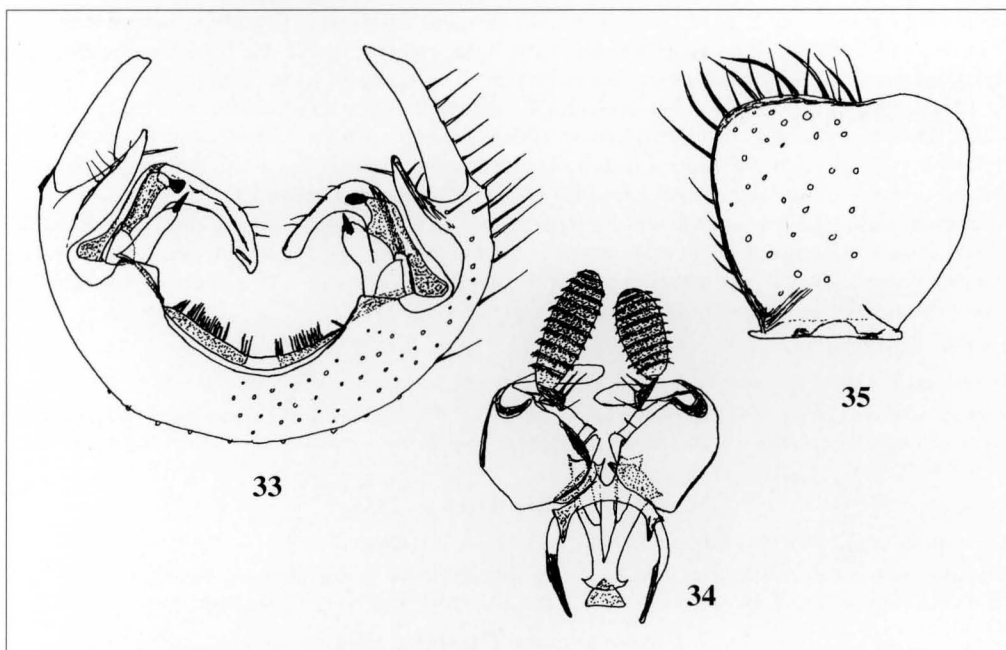
**Male.** **Head** black, with white bristling. Outer ocellus close to eye margin. Antenna missing in both specimens examined.

**Thorax** black, grey dusted, with white bristling. Prothorax with white setae. Pleura and laterotergite bare.

**Wing** as above species. Costa reaches 0.4 distance from  $R_5$  to  $M_1$ . Haltere yellow. **Wing length** 3.3–3.5 mm. **Legs** yellow including coxae, only hind coxa dark at base and hind femur dark on apical quarter. Leg bristling and tibial spurs coloured as previous species. Mid tibia with 5 *a* and 3 *p-d* setae, some weak *p* setae near tip. Hind tibia with 13 *a* and 6–8 strong *d* setae, with some shorter closer set *d* setae near tip. Fore tarsus elongate; metatarsus equal to two-thirds length of its tibia and to tarsomeres 2–4 together.

**Abdomen** black, with pale hairs except on tergite 9 and genitalia (Figs 36–39) which bear dark setae. Gonocoxites bluntly rounded medially with short setae on apical margin not forming combs and with a short asetose digitate medial process; gonostylus slender with comb of strong thickened apical setae (Fig. 36).





**Figs 33–35:** Male genitalia of *Docosia enos* spec. nov.: – **33:** Posteroventral view of gonocoxites and gonostyli. – **34:** Cerci (above) and aedeagal complex. – **35:** Dorsal view of tergite 9.

**Female.** Unknown.

**Etymology.** This is named for the queen of king Minos and is a noun in apposition.

**Remarks.** Distribution type 10. The specimens of this species were sent to Petr LAŠTOVKA, who confirmed that it was previously unknown to him, so it has evidently been found only on Crete. The digitate median process of the gonocoxites is distinctive. In the simple gonostylus with a series of blunt teeth it resembles *D. moravica* LANDROCK but that has a larger median gonocoxal process and setose laterotergite.

*Greenomyia borealis* (WINNERTZ, 1863)

**Material.** GREECE: Mainland: IP4, 1 ♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread but uncommon northern Palaearctic species (ZAITZEV 1994 and 1999b). The Greek specimen has mainly yellow coxae, while specimens examined from other parts of Europe have mainly dark coxae.

*Leia bimaculata* (MEIGEN, 1804)

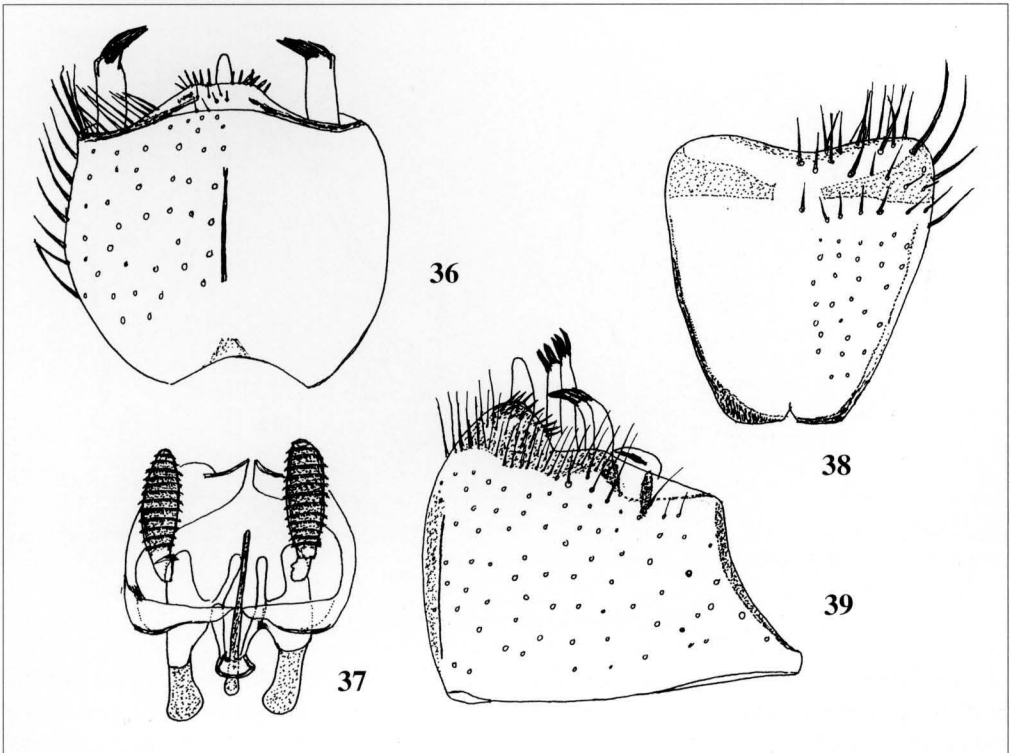
**Material.** GREECE: Mainland: IP1, 1 ♀; IP3, 1 ♂; MK26; MK28, 2 ♂♂; TH4, 1 ♂; TH8, 3 ♂♂; SE7, 1 ♂. Peloponnese: 10, 1 ♂; 17, 1 ♂; 23, 3 ♂♂; 24, 1 ♂. Cephalonia: 5, 1 ♀. Corfu: 1, 1 ♂; 2, 4 ♂♂, 1 ♀; 5, 3 ♂♂, 2 ♀♀; 12, 2 ♀♀; 18, 2 ♂♂. Lesbos: 2, 1 ♂. Milos: 1, 5 ♂♂, 4 ♀♀. Paros: 1, 1 ♂. Rhodes: 5, 1 ♂; 6, 1 ♂. Crete: 1, 1 ♂, 1 ♀; 3, 1 ♂; 14, 1 ♀; 20, 1 ♂; 21, 1 ♂; 23, 2 ♂♂; 27, 1 ♂; 28, 1 ♀; 29, 1 ♀; 30, 2 ♂♂, 1 ♀; 36, 1 ♀; 41, 1 ♂, 1 ♀; 43, 1 ♀; 44, 5 ♂♂, 2 ♀♀; 45, 1 ♂; 53, 8 ♂♂, 2 ♀♀; 63, 2 ♂♂. CYPRUS: 9, 1 ♂, 1 ♀; 10, 1 ♂; 12, 1 ♂; 21, 1 ♀; 36, 1 ♂; 42, 1 ♂; 44, 3 ♂♂; 47, 1 ♂; 51, 2 ♂♂.

**Remarks.** Distribution type 3. A common species throughout Europe and the Mediterranean region, GEORGHIOU (1977) recorded it from Cyprus and CHANDLER (1994) mentioned occurrence in Cephalonia, Corfu, Lesbos, Paros, Crete and Cyprus, as well as Morocco, Israel and Turkey. It has also recorded from Algeria (BURGHELE-BALACESCO 1972), Malta (CHANDLER & GAIT 2000).

*Leia ? crucigera* ZETTERSTEDT, 1838

**Material.** GREECE: Cephalonia: 5, 1 ♀.

**Remarks.** New to Greece. Distribution type 4. The Greek female agrees in coloration with that of *L. crucigera*, but males are necessary for confirmation. This is a widespread European species.



**Figs 36–39:** Male genitalia of *Docosia pasiphae* spec. nov.: – 36: Ventral view of gonocoxites and gonostyli. – 37: Cerci (above) and aedeagal complex. – 38: Dorsal view of tergite 9. – 39: Lateral view of gonocoxites and gonostyli.

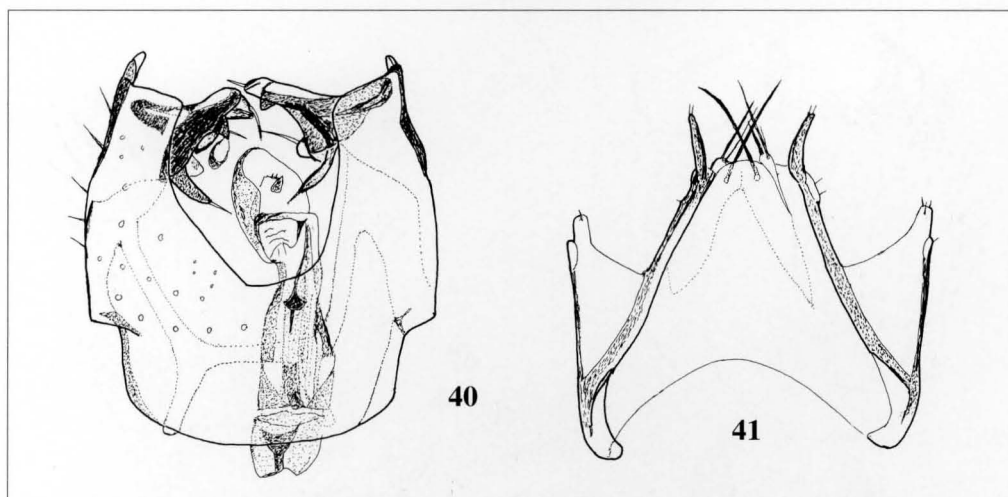
### *Leia graeca* BECHEV, 1997

**Type material.** GREECE: Mainland: SE7, 2♂♂ paratypes; SE9, 1♂; SE10, 1♂; TH6, ♂ holotype. Peloponnese: 6, 1♂ paratype, 1♀; 9, 2♂♂ paratypes. Cephalonia: 10, 2♂♂ paratypes, 1♀.

**Remarks.** Distribution type 10. BECHEV (1997a) described this species from the mainland of Greece, the Peloponnese and Cephalonia, mentioning resemblance to *L. umbrosa* CASPERS, 1991 described from Corsica. It is unknown outside Greece.

### *Megophthalmidia* DZIEDZICKI, 1889

This genus is relatively poor in species and hitherto only one widespread species, the entirely yellow *M. crassicornis* (CURTIS, 1837) has been certainly recorded from Europe. A rather different species, mainly black with yellow abdominal markings, *M. decora* (SANTOS ABREU, 1920) occurs in the Canary Islands but only females were examined and figured by CHANDLER & RIBEIRO (1995). A male from Madeira figured here is considered likely to be conspecific. Other entirely dark bodied species are known from Japan and the Far East of Russia (*M. takagii* SASAKAWA, 1964) and North America (*M. occidentalis* JOHANSEN, 1909). KURINA (2004) described *M. samosica* from the Greek island of Samos and he noted that this was related to *M. takagii*, resembling it in coloration and structure of the male genitalia. Here two further species belonging to the same species group are described from Cyprus and the Greek mainland. In addition two species more closely related to *M. decora* are also described from Greece, one at least of them occurring more widely in the Balkans. Similar females have also been examined from Corsica and Israel (CHANDLER 1994), indicating the wider occurrence of this species group in the Mediterranean region.



**Figs 40–41:** Male genitalia of *Megophthalmidia decora* (SANTOS ABREU): – **40:** Ventral view of gonocoxites and gonostyli. – **41:** Dorsal view of tergite 9 and cerci.

***Megophthalmidia alnicola* spec. nov.**

(Figs 45–46)

**Material. Holotype:** ♂, CYPRUS (site 14), west of Padhoulas, alder flushes, 7.v.1982, leg. A.E. STUBBS (BMNH).

**Male.** Very similar to *M. illyrica* spec. nov. in structure and coloration. Obviously differing only in the form of tergite 9 (Fig. 45), which has the median process apically tapered with a narrow cleft on apical half but is not emarginate at tip. Gonocoxites (Fig. 46) similar, medially emarginate; ventral part of gonostylus appears narrower apically in ventral view than in *M. illyrica*. **Wing length** 2.8 mm.

**Female.** Unknown.

**Etymology.** The name refers to the occurrence of the type specimen in *Alnus* woodland and is a noun in apposition.

**Remarks.** Distribution type 10. This single male from Cyprus agrees in most respects with *M. illyrica* and further material is desirable to determine if it is specifically distinct.

***Megophthalmidia cedricola* spec. nov.**

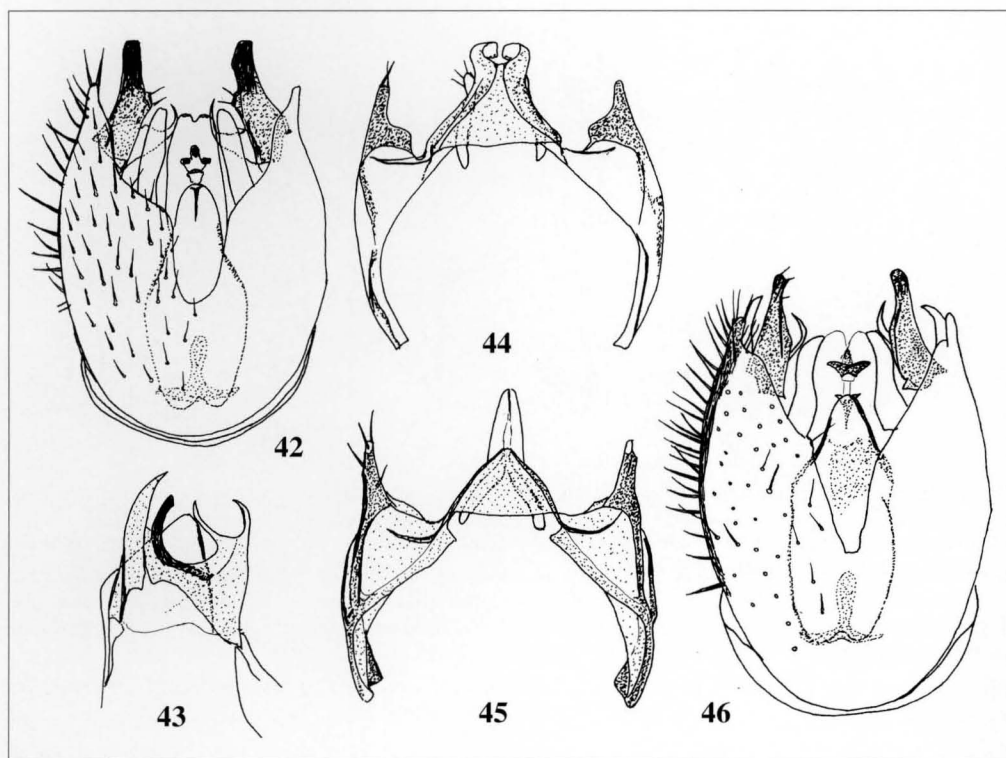
(Figs 53–56)

**Type material. Holotype:** ♂, CYPRUS (site 11), Cedar Valley, 2.v.1982, leg. A. E. STUBBS (BMNH). **Paratypes:** 4♂♂, 3♀♀, Cyprus (site 29), Kyrenia, iii.1953, leg. P. A. BUXTON (BMNH); 1♂, 4♀♀, same data as holotype; 1♂, 2♀♀, Cyprus (site 13), east of Kykko, pine forest, 3.v.1982, leg. A.E. STUBBS; 2♂♂, 2♀♀, Cyprus (site 21), Caledonian Falls, 1200 m, 21.v.1983, leg. I. F. G. McLEAN. **Other material.** CYPRUS: 37, 5♂♂, 2♀♀♀; 38, 1♀; 39, 1♂; 43, 2♀♀; 49, 1♂; 53, 1♂, 1♀; 55, 4♂♂, 1♀; 57, 2♂♂.

**Male. Head** black, grey dusted. Ocelli in a straight row, distant from eye margin. Antenna dark brown, shorter than thorax with flagellomeres shorter than broad. Proboscis short, about a third eye height. Palpus yellowish to dark brown.

**Thorax** black, grey dusted with black bristling, longer on sides of mesonotum. Two pairs of strong scutellars. Prothorax with dark bristling. Laterotergite with short dark bristling. **Wing** clear, with costa and radial veins brownish, other veins colourless. Vein  $R_1$  subequal to r-m, ending at three-fifths wing length. Costa extends two-thirds distance from  $R_5$  to  $M_1$ . Median fork a little shorter than its stalk. Posterior fork begins level with base of median stalk. Haltere yellow. **Wing length** 2.3–2.6 mm. **Legs** yellow. Mid tibia with 4–6 *a*, 2–3 *p-d* and 2–4 *p* setae near tip. Hind tibia with 12–14 *a* (shorter and more closely set on apical half), 16–20 irregularly biserial close-set *p-d* and 4 short *p* near tip.

**Abdomen** all black, with tergites more shining and sternites grey dusted. Tergites 2–5 progressively shorter, 6 short and retracted; sternites 5–6 weak and emarginate apically; tergites 7 and 8 reduced to a narrow strip dorsally but sternites 7 and 8 broad and well-developed, 7 with two triangular basal processes.



**Figs 42–46:** Male genitalia of *Megophthalmidia* species: – 42–44: *M. illyrica* spec. nov. – 42: Ventral view of gonocoxites and gonostyli. – 43: Internal view of gonostylus. – 44: Dorsal view of tergite 9 and cerci. – 45–46: *M. alnicola* spec. nov. – 45: Dorsal view of tergite 9 and cerci. – 46: Ventral view of gonocoxites and gonostyli.

Genitalia (Figs 54–56) black; gonocoxites enlarged ventrally and sternites 5 onwards deflected ventrally. Tergite 9 (Fig. 56) with a pair of apically broadened lateral processes, downturned in lateral view.

**Female.** Very similar to male but antenna shorter with flagellomeres more than twice as broad as long. Mid tibia with 3–4 *a*, 2 *p-d* and 3–4 *p* near tip. Hind tibia with 10 *a*, 18 *p-d* and 3 *p*. Abdomen shining black. Ovipositor (Fig. 53) with cercus brownish, flat, elongate, with apical segment short and rounded; sternite 8 dark brown with brownish apical setae. **Wing length** 2.2–2.8 mm.

**Etymology.** The name derives from its occurrence in Cedar Valley and is a noun in apposition.

**Remarks.** Distribution type 10. This species is evidently closely related to *M. samosica* KURINA and *M. pytho* spec. nov. These species are, however, distinguished by details of the genital structure. The form of tergite 9 is a particularly obvious distinction, broad and blunt ended apically in dorsal view in *cedricola*, narrower and more pointed internally in *M. pytho*, similar but pointed laterally in *samosica*.

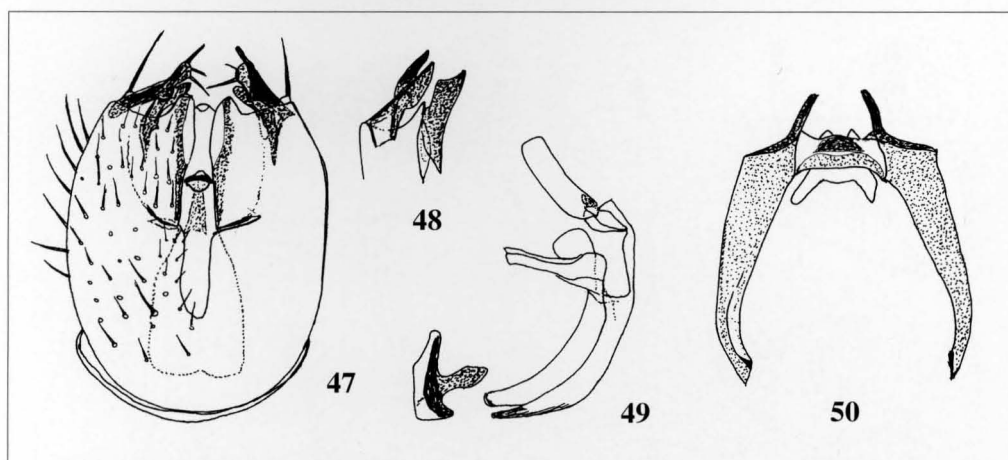
### *Megophthalmidia decora* (SANTOS ABREU, 1920)

(Figs 40–41)

**Material.** 1 ♂, MADEIRA, laurisilva project, 1997, leg. D. AGUIN POMBO.

The Madeiran male is in poor condition, having only the bases of the wings and the hind legs are missing. On the basis of distribution and resemblance to the female of *M. decora* it is provisionally assigned to that species. Further material of both sexes from Madeira and the Canary Islands will be necessary for confirmation.

The body is mainly dark, with tergites 1–4 paler apically and the genitalia are brownish yellow. The legs are yellow with bristling dark. The antenna is about as long as the thorax with flagellomeres about as long as broad. The proboscis is about half head height as in female of *decora*. The body length is 2.5 mm.



**Figs 47–50:** Male genitalia of *Megophthalmidia ionica* spec. nov.: – **47:** Ventral view of gonocoxites and gonostyli. – **48:** Internal view of gonostylus. – **49:** Lateral view of aedeagus. – **50:** Dorsal view of tergite 9 and cerci.

The structure of the male genitalia (Figs 40–41) is closest to *M. illyrica* spec. nov. of the species described here, but there are obvious differences in the form of the gonostylus, which has a slender ventral lobe bearing an apical seta (Fig. 40) and of tergite 9, which is similar to *M. illyrica* and *M. alnicola* in the presence of a short slender lateral lobe but is blunt medially and with slender submedian processes as in *M. ionica* (Fig. 41).

***Megophthalmidia illyrica* spec. nov.**

(Figs 42–44, 52)

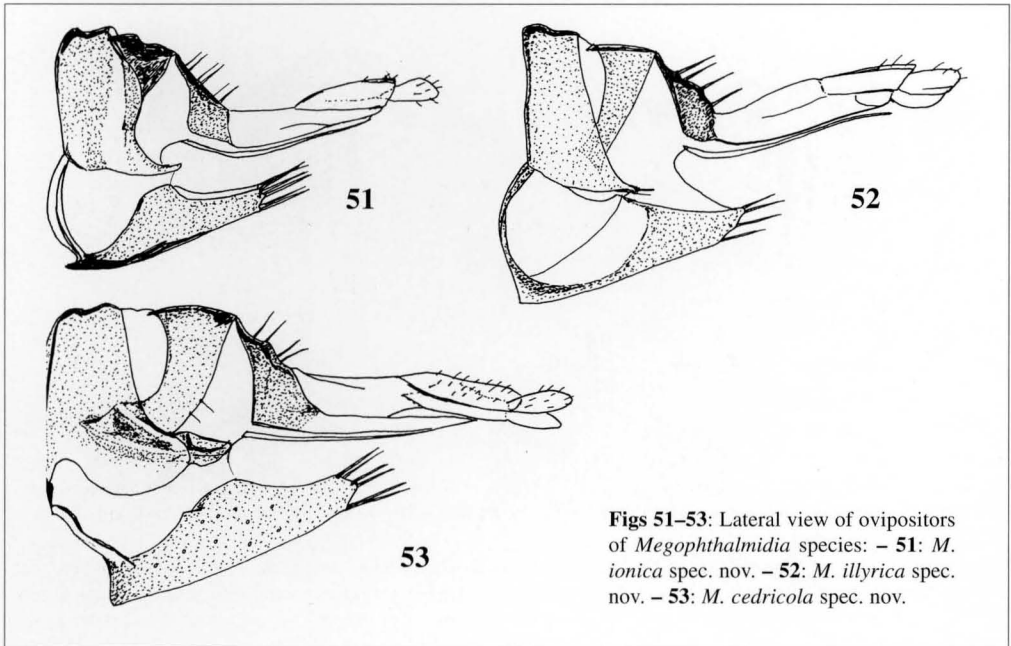
**Type material. Holotype:** ♂, GREECE, Corfu (site 10), Kavos, near monastery, 1.v.1980, leg. I. F. G. McLEAN (BMNH). **Paratypes:** 5♂♂, 1♀, same data as holotype; 1♂, Corfu (site 9), Kavos, track to monastery, 1.v.1980; 2♂♂, Corfu (site 13), Linia to Lake Korission, 6.v.1980 (all leg. I. F. G. McLEAN). **Other material:** 1♂, 1♀, CROATIA, Mlini, 8 km south-west of Dubrovnik, 10.v.1980, leg. A. E. STUBBS; 1♂, Greece, Peloponnese (site 9), Arkadía, 2 km north-west of Langadia, 800 m, steep deciduous woodland, 28.iv.1980, leg. A.E. STUBBS; 2♀♀, Greece, Peloponnese (site 23), Lakonia, 5 km south of Monemvasia, 10.i and 13.i.1984, leg. G. CHRISTENSEN (ZMUC); 1♀, Cephalonia (site 8), Pastra, wooded stream gorge, 14.v.1981, leg. I. F. G. McLEAN; 1♂, Crete (site 42), East Lassithi, streambed, 19.v.1982, leg. I. F. G. McLEAN.

**Male. Head** black, grey dusted. Ocelli arranged as in *ionica*. Antenna shorter than thorax, dark brown, sometimes a little lighter basally. Flagellomeres about as long as broad. Proboscis relatively shorter than in *M. ionica*, only about a third eye height. Palpus yellow.

**Thorax** black, grey dusted, sometimes narrowly orange brown on humeral margin. Mesonotum with short uniformly distributed black bristling, appearing paler from some aspects and longer black setae laterally. Anterior spiracle yellow. Prothorax with black bristling and several strong upturned setae on pronotal lobe. Four strong scutellar marginal setae with short dark hairs between. Laterotergite with whitish to dark bristling. **Wing** yellowish. Vein  $R_1$  ends at three fifths wing length, and is subequal to a little longer than r-m. Costa extends three quarters distance from  $R_5$  to  $M_1$ . Venation otherwise as in *ionica*. Haltere yellow. **Wing length** 2.3–2.8 mm. **Legs** yellow including coxae and hind femur. Mid tibia with 3–4 *a*, 3 *d*, 3 *p* near tip and 3 *v* setae. Hind tibia with 14 *a*, 16 irregular *d* on apical three-quarters and 4–6 *p* setae near tip.

**Abdomen** shining dark brown to blackish, with black bristling. Tergites 1–4 more or less yellow on apical third to half, markings may be more or less interrupted in middle (especially on 3–4); tergite 5 may be obscurely yellow apically. Sternites vaguely yellowish. Genitalia (Figs 42–44) dark brown. Tergite 9 (Fig. 44) with lateral processes near side margins and a prominent median process, which has an apical emargination. Gonocoxites (Fig. 42) medially emarginate, more enlarged ventrally than in *ionica*, so that sternites from 5 onwards are ventrally directed *in situ*; gonostylus with dorsal process bearing long pointed marginal processes so that it appears deeply bifid (Fig. 43).





**Figs 51–53:** Lateral view of ovipositors of *Megophthalmidia* species: – 51: *M. ionica* spec. nov. – 52: *M. illyrica* spec. nov. – 53: *M. cedricola* spec. nov.

**Female.** Similar to male but antenna smaller with flagellomeres narrower and distinctly shorter than broad. Mid tibia with up to 5 *d*, hind tibia with up to 22 *d*. Abdomen with tergites 1–4 yellow on apical third to two fifths, their sternites more extensively yellowish; segments 5–8 darkened but ovipositor (Fig. 52) yellowish brown. Sternite 8 with brownish yellow apical setae. **Wing length** 2.6–2.7 mm.

**Etymology.** The name is an adjective referring to the ancient region of Illyria, to reflect the apparently wider distribution of this species than is so far known for *M. ionica*.

**Remarks.** Distribution type 8. CHANDLER (1994) mentioned a female from Israel as probably belonging to this widely distributed species, but discovery of males there would be desirable to confirm its identity and determine whether it agreed more with typical *illyrica* or the form from Cyprus described above in genital structure.

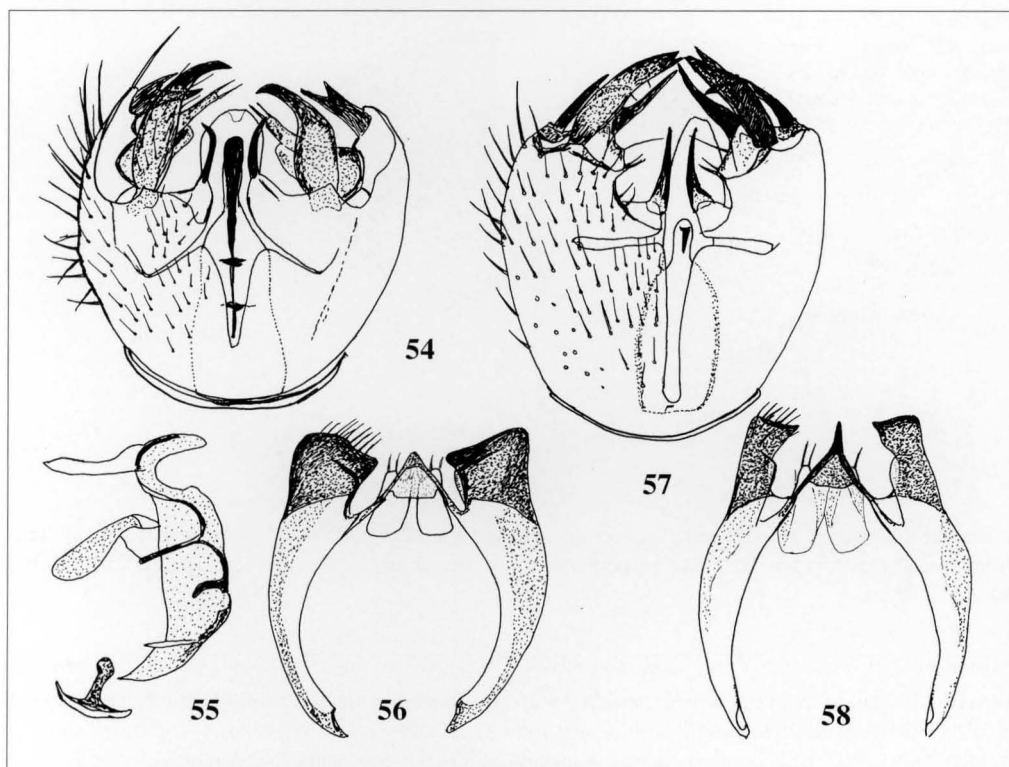
***Megophthalmidia ionica* spec. nov.**

(Figs 47–51)

**Type material. Holotype:** ♂, GREECE, Corfu (site 16), Kinopiastes, 11.v.1980, leg. I. F. G. McLEAN (BMNH). **Paratypes:** 3 ♂♂, 1 ♀, Corfu (site 17), dry gorge north of Ag. Deka, 11.v.1980; 1 ♂, 1 ♀, Corfu (site 7), Benitses, by stream, 29.iv.1980; 1 ♀, Corfu (site 6), Benitses, olive grove, 29.iv.1980; 1 ♀, Corfu (site 18), between Ag Deka and Benitses, 11.v.1980; 1 ♂, Corfu (site 12), dry gorge 0.5 km north of Paleocastritsa, 5.v.1980; 1 ♀, Cephalonia (site 2), Mount Enos, 1000 m, 15.v.1981 (all leg. I. F. G. McLEAN). **Other material:** 1 ♀, Greece, Mainland (site SE9), Sterea Elláda, Fokída, Parnassos Mountains, Drossohori, conifer forest, 14.v.1998, leg. P. GATT.

**Male. Head** black, grey dusted, with dark bristling. Ocelli in a slightly curved row (middle ocellus a little in front) on top of head, distant from upper eye margin. Antenna shorter than thorax, dark brown, with long dorsal setae on pedicel. Flagellomeres shorter than broad. Proboscis is half height of eye. Palpus brownish yellow.

**Thorax** as *M. illyrica* spec. nov. **Wing** clear, slightly brownish towards costa, with costa and radial veins brown. Vein Sc short, ending in R. Vein R<sub>1</sub> gently curved towards costa, a little longer than r-m, ending at two-thirds wing length. Vein Rs short and vertical. Vein R<sub>4</sub> absent. Vein R<sub>5</sub> straight. Costa extends 0.6 to two-thirds distance from R<sub>5</sub> to M<sub>1</sub>. Median fork a little longer than its stalk. Posterior fork begins at level of base of median stalk or just beyond. Vein An very short. Radial veins, r-m and fork veins setose. Haltere yellow. **Wing length** 2.2–2.8 mm. **Legs** brownish yellow, with mid and hind coxae more brownish and hind femur brownish near tip. Fore metatarsus half length of its tibia. Mid tibia with 4 *a*, 3 *d*, 4–6 short *p* setae near the tip and 3 *v* setae. Hind tibia with 12–14 irregular *a*, 20–21



**Figs 54–58:** Male genitalia of *Megophthalmidia* species: – **54–56:** *M. cedricola* spec. nov. – **54:** Ventral view of gonocoxites and gonostyli. – **55:** Lateral view of aedeagus. – **56:** Dorsal view of tergite 9 and cerci. – **57–58:** *M. pytho* spec. nov. – **57:** Ventral view of gonocoxites and gonostyli. – **58:** Dorsal view of tergite 9 and cerci.

irregular *d* on apical three quarters and 4–6 *p* near tip. Tibial spurs brown.

**Abdomen** mainly black, grey dusted, with tergites 2–4 bearing yellow lateral patches on the apical third; sternites sometimes yellow apically. Genitalia (Figs 47–50) black; gonocoxites not as enlarged ventrally as in other species; gonostylus (Fig. 48) with dorsal lobe blunt ended, without processes. Tergite 9 (Fig. 50) without a median projection and its lateral processes are narrow prongs, more medial in position than in other species.

**Female.** Similar to male, but antenna smaller and shorter with flagellomeres narrow. Abdominal coloration similar, but the yellow more restricted to narrow hind margins on tergites 2–4, only 2–3 basally yellowish; segments 5–8 darkened and ovipositor (Fig. 51) brown. Sternite 8 dark brown with strong brown apical setae. **Wing length** 2.2–2.4mm.

**Etymology.** This species is named after the Ionian Islands, where it was collected.

**Remarks.** Distribution type 10. The mainland specimen is probably conspecific but is excluded from the paratypes as corresponding males have not been found there.

***Megophthalmidia pytho* spec. nov.**

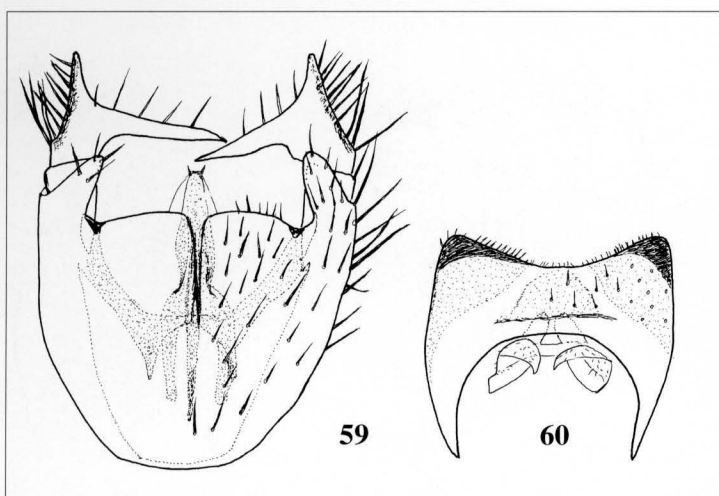
(Figs 57–58)

**Type material. Holotype:** ♂, GREECE, Mainland (site SE7), Fokída, Delphi, 5.v.1979, leg. A.E. STUBBS (BMNH).

**Other material:** 2♂, Greece, Peloponnese (site 6), Arkadía, south-west of Lake Takka, shaded stream, 27.iv.1979, leg. A. E. STUBBS (both lack abdomen).

**Male.** Very similar to *M. cedricola* spec. nov. in structure and coloration. Legs yellow, but fore and mid coxae brownish basally and hind coxa brown on external face. Hind tibia with 6–7 *p* setae near tip. Genitalia (Figs 57–58) with lateral processes of tergite 9 (Fig. 58) distinctly narrower in ventral view than in *M.*

**Figs 59–60:** Male genitalia of *Novakia scatopsiformis* STROBL. – **40:** Ventral view of gonocoxites and gonostyli. – **41:** Dorsal view of tergite 9 and cerci.



*cedricola* and medial process more slender and pointed apically; gonocoxites similar with lateral clefts from medial emargination but latter deeper; gonostylus with dorsal process more tapered apically. **Wing length** 2.3 mm.

**Female.** Unknown.

**Etymology.** This is the name of the sacred grove that earlier occupied the site of Delphi and is a noun in apposition.

**Remarks.** Distribution type 10. This species differs from *M. cedricola* and *M. samosica* in the form of tergite 9 and in other details of the genital structure.

#### *Megophthalmidia samosica* KURINA, 2004

**Remarks.** Distribution type 10. KURINA (2004) described this species from both sexes collected on the island of Samos. *M. cedricola* and *M. pytho* are evidently related but show small differences in the genital structure, suggesting that speciation of this group is occurring in the east Mediterranean islands.

#### *Novakia scatopsiformis* STROBL, 1893

(Figs 59–60, 63, 65–66)

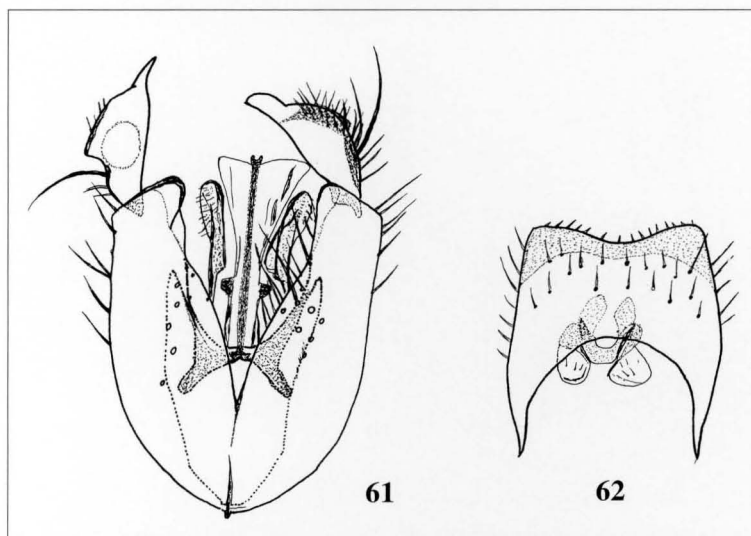
= *Kerteszia tunesica* ENDERLEIN, 1913: 27.

**Material.** GREECE: Corfu: 17, 1 ♂. Crete: 38, 1 ♀; 39, 1 ♂; 41, 1 ♀. CYPRUS: 11, 1 ♂; 19, 1 ♂; 23, 1 ♀; 55, 1 ♂.

**Male.** Head shining black, grey dusted, with black bristling. Ocelli in a straight line; outer ocellus twice its diameter from eye margin. Antenna (Fig. 65) black, shorter than head + thorax, with long setae dorsally on pedicel; scape and pedicel shorter than broad; flagellomeres about as long as broad (at least twice as long as broad in *N. simillima* STROBL), only the terminal flagellomere elongate. Palpus brownish yellow.

**Thorax** shining black, thinly grey dusted, with uniformly short dark setae on mesonotum. Two pairs of strong dark scutellar setae. Pleura and mediotergite bare. **Wing** clear, with costa and radial veins thick and brown, other veins colourless. Vein Sc short, thick and apparently ending free, but faintly extended to margin at two-thirds length to tip of  $R_1$ . Vein  $R_1$  short; r-m and  $R_5$  fused with its base so that  $R_s$  is absent. Crossvein r-m long, close to R and setose. Vein  $R_5$  ends at apical quarter of wing. Costa extends one third of distance from  $R_5$  to  $M_1$  (0.4–0.5 distance in *N. simillima*). Stem of median fork about as long as the fork (fork longer in *simillima*), faint basally. Vein tb short, so that posterior fork begins level with the radial fusion. A fold of the membrane is present between the forks, ending at apical third of wing. Vein An short. Fork veins, stem of posterior fork and An bear setae. Haltere with knob black. **Wing length** 1.8–2.0 mm. **Legs** short, thickened; dark brown including coxae, but fore leg a little lighter, obscurely brownish yellow. Fore metatarsus 0.6 length of its tibia. Mid tibia with 6 *a* and 6 *d* setae, 5 short *p* setae near tip. Hind tibia with 10 *a* and 13 *d* setae. Tibial spurs brownish yellow.

**Abdomen** black. Tergite 2 broad, tergites 3–6 progressively shorter, tergites 7–8 narrow with their sternites twice as long. Tergite 9 (Fig. 60) shallowly emarginate on apical margin. Gonocoxites with



**Figs 61–62:** Male genitalia of *Novakia simillima* STROBL: – **61:** Ventral view of gonocoxites and gonostyli. – **62:** Dorsal view of tergite 9 and cerci.

narrow medial cleft, so that slightly rounded apical lobes are approximated medially; gonostylus with distally pointed external margin and long tapered internal lobe (Fig. 59).

**Female.** Antenna (Fig. 66) much smaller than in male, only half length of thorax, with flagellomeres half as long as broad. Abdomen with tergites 6–8 progressively shorter and contracted. Tergite 8 with a series of long widely spaced slender black setae and below them many thick golden setae forming a conspicuous fringe, overhanging broad yellow cerci (Fig. 63). **Wing length** 2.3 mm.

**Remarks.** Distribution type 6. This was described by STROBL from a Croatian type and has since been recorded from Tunisia (ENDERLEIN 1913), Israel (CHANDLER 1994), Bulgaria (ZAITZEV 1994, BECHEV 2002a), the Czech Republic (ŠEVČÍK 2001) and Spain (CHANDLER & BLASCO-ZUMETA 2001). It is evidently a widespread Mediterranean species and CHANDLER (1994) mentioned that material had also been examined from the Peloponnese, Cephalonia, Corfu and Cyprus.

CHANDLER & BLASCO-ZUMETA (2001) recognised that there were two European species of *Novakia*. They discussed the type material and re-described *N. simillima* STROBL, 1910 from Spanish material, indicating the differences from *N. scatopsiformis*. The genitalia of these species have not previously been figured, so male and female genitalia of *N. simillima* are also figured here (Figs 61–62, 64). The gonocoxites in *N. simillima* (Fig. 61) are widely emarginate medially, exposing the aedeagal complex in ventral view; the gonostylus is simpler with a tapered apical lobe but lacking the pointed internal lobe found in *N. scatopsiformis*. The ovipositor is similar with tergite 8 bearing both slender black and broader golden setae as in *N. scatopsiformis* but this tergite is distally expanded laterally and the cerci are smaller and narrower. The bases of the antennal flagellum for both sexes of *N. simillima* are also figured (Figs 67–68) to indicate the sexual and specific differences.

### Subfamily Mycomyinae

#### *Mycomya (Mycomya) cinerascens* (MACQUART, 1826)

**Material.** GREECE: Mainland: SE3, 1 ♂. Peloponnese: 10, 1 ♂. Thasos: 3, 1 ♂; 4, 1 ♂.

**Remarks.** New to Greece. Distribution type 1. This is a common Holarctic species (VÄISÄNEN 1984a).

#### *Mycomya (Mycomya) flavicollis* (ZETTERSTEDT, 1852)

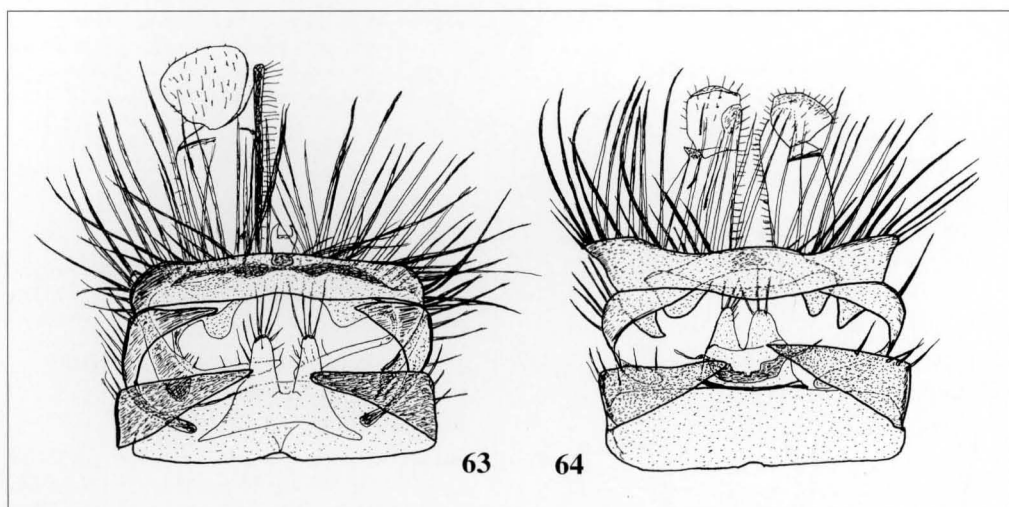
**Material.** GREECE: Peloponnese: 29, 1 ♂. Corfu: 5, 1 ♂.

**Remarks.** New to Greece. Distribution type 3. Widespread in Europe and also known from the Caucasus and Iran (VÄISÄNEN 1984a, ZAITZEV 1994).

#### *Mycomya (Mycomya) marginata* (MEIGEN, 1818)

**Material.** GREECE: Peloponnese: 34, 1 ♀. Euboa: 6, 1 ♂. CYPRUS: 11, 1 ♀.

**Remarks.** New to Greece and Cyprus. Distribution type 2. This is a widespread species in the Palaearctic, including the Mediterranean region, Caucasus and Iran (VÄISÄNEN 1984a, ZAITZEV 1994).



Figs 63–64: Dorsal view of ovipositors of *Novakia* species: – 63: *N. scatopsiformis* STROBL – 64: *N. simillima* STROBL.

***Mycomya (Mycomya) occultans* (WINNERTZ, 1863)**

**Remarks.** Distribution type 2. LUNDSTRÖM (1912) described *Sciophila corcyrensis*, a synonym of *M. occultans*, from Corfu. This is a widespread Palearctic species, also extending into India (Uttar Pradesh), Burma (VÄISÄNEN 1984a and 1996) and China (WU & YANG 1994).

***Mycomya (Mycomya) prominens* (LUNDSTRÖM, 1913)**

**Material.** GREECE: Peloponnese: 6, 1♂, 1♀; 32, 1♂; 34, 1♀. Cephalonia: 10, 1♂. Kithira: 1, 1♂, 1♀. Milos: 1, 3♂♂. Crete: 1, 2♂♂; 20, 2♀♀; 29, 1♀. CYPRUS: 18, 1♀♀.

**Remarks.** Distribution type 3. This is a widespread European species, also known from Madeira (CHANDLER & RIBEIRO 1995) and Israel (CHANDLER 1994). VÄISÄNEN (1984a) cited a record from mainland Greece. CHANDLER (1994) mentioned that it occurred in Cephalonia, Corfu, Crete and Cyprus. As only a female has been found in Cyprus this record requires confirmation.

***Mycomya (Mycomya) pygmalion* VÄISÄNEN, 1984**

**Material.** GREECE: Mainland: TH9, 1♂. Rhodes: 1, 7♂♂, 3♀♀; 2, 1♂. Crete: 3, 3♂♂, 1♀.

**Remarks.** Distribution type 6. This species was described from Cyprus (VÄISÄNEN 1984a) and has since been recorded widely in the Mediterranean region, including Israel (CHANDLER 1994). RIBEIRO (1991) recorded it from Portugal and CHANDLER & BLASCO-ZUMETA (2001) recorded it from Spain. CHANDLER (1994) mentioned occurrence in Rhodes and Crete.

***Mycomya (Mycomya) sigma* JOHANNSEN, 1910**

**Material.** GREECE: Cephalonia: 3, 1♂.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species that is widespread in Europe (VÄISÄNEN 1984a).

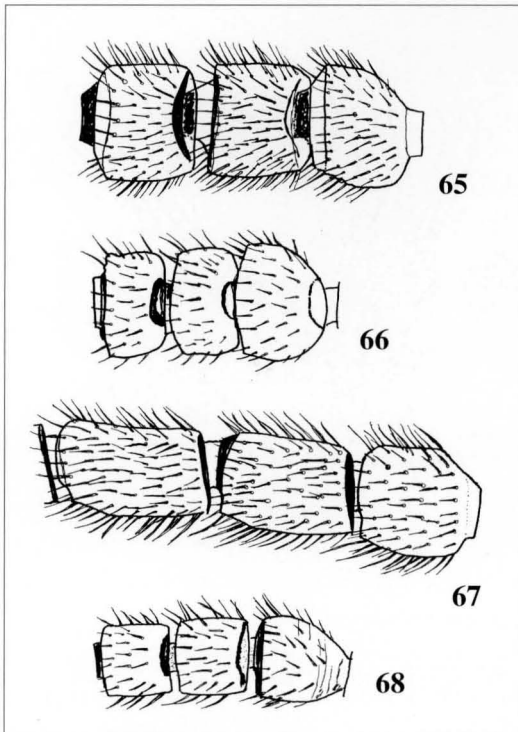
***Mycomya (Mycomya) tenuis* (WALKER, 1856)**

= *intermissa* PLASSMANN, 1984, **syn. nov.**

**Type material.** Holotype ♂ of *Mycomya intermissa* PLASSMANN: GREECE, Cephalonia, Mount Enos, 2–4.vi.1977, leg. H. MALICKY (ZSM). **Other material.** GREECE: Cephalonia: 8, 1♂; 9, 1♂; 17, 1♂, 1♀. Corfu: 5, 1♂. Lesbos: 3, 1♂, 1♀. Crete: 1, 1♂.

**Remarks.** Distribution type 3. This is widespread in Europe including the Mediterranean parts (VÄISÄNEN 1984a) and it was recorded from Israel by CHANDLER (1994), who also referred to its presence in Corfu, Cephalonia, Lesbos and Crete. PLASSMANN (1984) described *intermissa* from Cephalonia. Examination of the type material has shown that it is conspecific with *M. tenuis*.





**Figs 65–68:** Three basal flagellomeres of antenna of *Novakia* species: – 65–66. *Novakia scatopsiformis* STROBL: – 65: male. – 66: female. – 67–68. *Novakia simillima* STROBL: – 67: male. – 68: female.

*Mycomya (Mycomyopsis) maura*  
(WALKER, 1856)

**Remarks.** Distribution type 4. KURINA (2004) recorded this as new to Greece, from Lesbos. It is widely distributed in western Europe (VÄISÄNEN 1984a).

*Mycomya (Mycomyopsis) permixta*  
VÄISÄNEN, 1984

**Material.** GREECE: Rhodes: 1, 1♂.

**Remarks.** New to Greece. Distribution type 1. The typical subspecies is widespread in the Palaearctic. Nearctic material was recognised as a distinct subspecies by VÄISÄNEN (1984a).

*Mycomya (Mycomyopsis) thrakis spec. nov.*  
(Figs 69–70)

**Type material.** **Holotype:** ♂, GREECE, Mainland (site TR1), Thráki, Évros, Lautros, wet pasture, 14.iv.1981, leg. J.-P. HAENNI (MHNN). **Paratypes:** 1♂, GREECE, Peloponnese (site 7), Arkadía, north-west of Tripolis, 28.iv.1979, leg. A. E. STUBBS; 1♂, GREECE, Main-

land (site MK11), Flórina, Pissoderi, 1200 m, 13.v.1998, leg. P. GATT; 1♀, same data as holotype; 1♀, (site MK12), Flórina, Andartiko, 1000 m, 13.v.1998, leg. P. GATT; 1♀, (site SE9), Sterea Elláda, Parnassos Mts, Drossohori, 800 m, conifer forest, 14.v.1998, leg. P. GATT; 1♀, (site SE8), Sterea Elláda, Fthiótída, Thermopile, hot spring and marsh, 14.v.1998, leg. M. J. EBEJER; 2♀, (site SE11), Sterea Elláda, Parnassos Mts, Eptalophos, 1400 m, meadow and conifers, 16.v.1998, leg. M. J. EBEJER; 1♀, Mainland (site SE3), Fokída, 3 km north of Kambos, v.1979, leg. A. E. STUBBS; 2♀, Peloponnese (site 6), Arkadía, south-west of lake Takka, 23.iv.1979, shaded stream, leg. A. E. STUBBS.

**Male.** Head shining black, thinly grey dusted. Antenna dull black, longer than head and thorax together, with flagellomeres three times as long as broad. Palpus black.

**Thorax** with mesonotum shining black, with black bristling including irregularly biserial acrostichals and dorsocentrals and longer setae at side margins. Pleura and mediotergite also black but grey dusted. Two pairs of strong scutellars. Prothorax with dark bristling. Pleura otherwise and mediotergite bare.

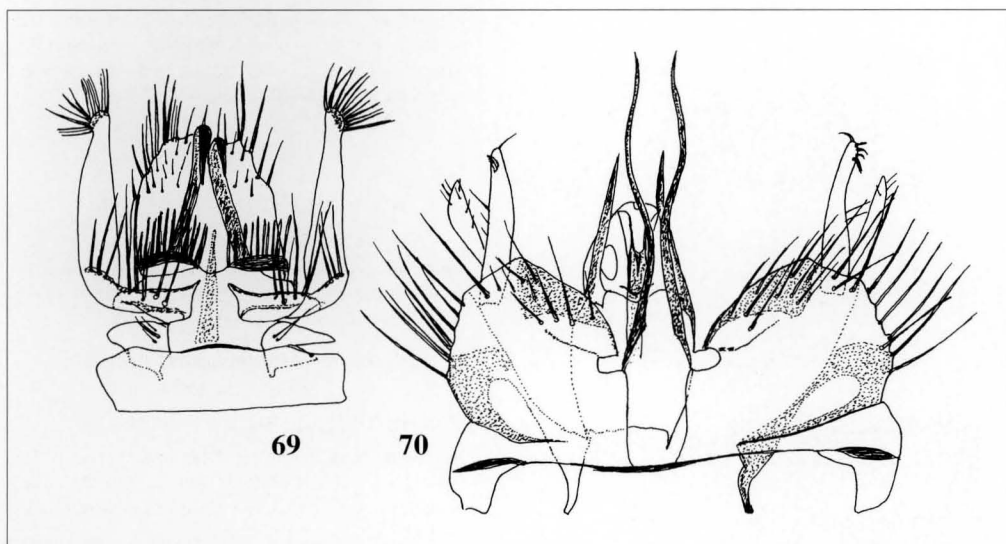
**Wing** clear with pale veins, darker in radial sector. Sc ends in R (with a short stump of Sc<sub>1</sub> present in Tripolis specimen), at or beyond middle of radial cell, which is 1.5–2 as long as broad. Vein Sc with 12–13 setae on apical part. Branches of median and posterior forks setulose. Base of posterior fork just beyond level of base of radial cell. Haltere yellow. **Wing length** 4.0 mm. **Legs** yellow except for black and grey-dusted coxae and trochanters, with dark bristling. Coxae simple in structure. Mid tibia with 4 *a*, 3 *p-d*, 3 *p* and 3–4 *v* setae. Hind tibia with 5 *a*, 4–5 *d* and 3–5 *p* setae.

**Abdomen** shining black. Genitalia (Figs 69–70) brownish; tergal lateral appendage with long setae on basal lobe, but mainly asetose apart from tuft of setae on blunt tip (Fig. 69); sternal submedian filaments long and sinuous (Fig. 70).

**Female.** Similar to male, but antenna shorter than thorax, with flagellomeres only about twice as long as broad. **Legs** with coxae paler in Kambos example. **Abdomen** with hairs becoming paler apically. Ovipositor short and brown. **Wing length** of female 4.1–4.7 mm.

**Etymology.** The name refers to the type locality being in the region of Thráki and is genitive.

**Remarks.** Distribution type 10. Because of the form of the tergal lateral appendage this species runs to couplet 3 in the key to subgenus *Mycomyopsis* in VÄISÄNEN (1984a). This couplet comprises two Nearctic species, *M. esox*



**Figs 69–70:** Male genitalia of *Mycomya thrakis* spec. nov.: – 69: Dorsal view of tergite 9 and cerci. – 70: Ventral view of gonocoxites and gonostyli.

VÄISÄNEN and *M. byersi* VÄISÄNEN, both of which differ in this appendage having flattened apical setae and the basal setose part being larger relative to the naked apical part. Also both are mainly yellow with brown thoracic stripes. It is closer to *byersi* in having long sternal submedian filaments.

***Neoempheria lineola* (MEIGEN, 1818)**

**Material.** GREECE: Mainland: TR3.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in Europe, but at least in western Europe it is scarce and confined to ancient broad-leaved forests. COE (1962a) recorded it from Montenegro and BECHEV (2002a) from Bulgaria. The record from Japan by OKADA (1940) requires confirmation.

***Neoempheria striata* (MEIGEN, 1818)**

**Material.** GREECE: Mainland: 55; 58. Corfu: 5, 1 ♀; 21, 1 ♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, reaching the Far East of Russia (ZAITZEV 1994 and 1999b).

**Subfamily Sciophilinae**

***Acnemia nitidicollis* (MEIGEN, 1818)**

**Material.** GREECE: Crete: 27, 1 ♂.

**Remarks.** New to Greece. Distribution type 2. This species is widespread in the Palaearctic Region.

***Allocotocera pulchella* (CURTIS, 1837)**

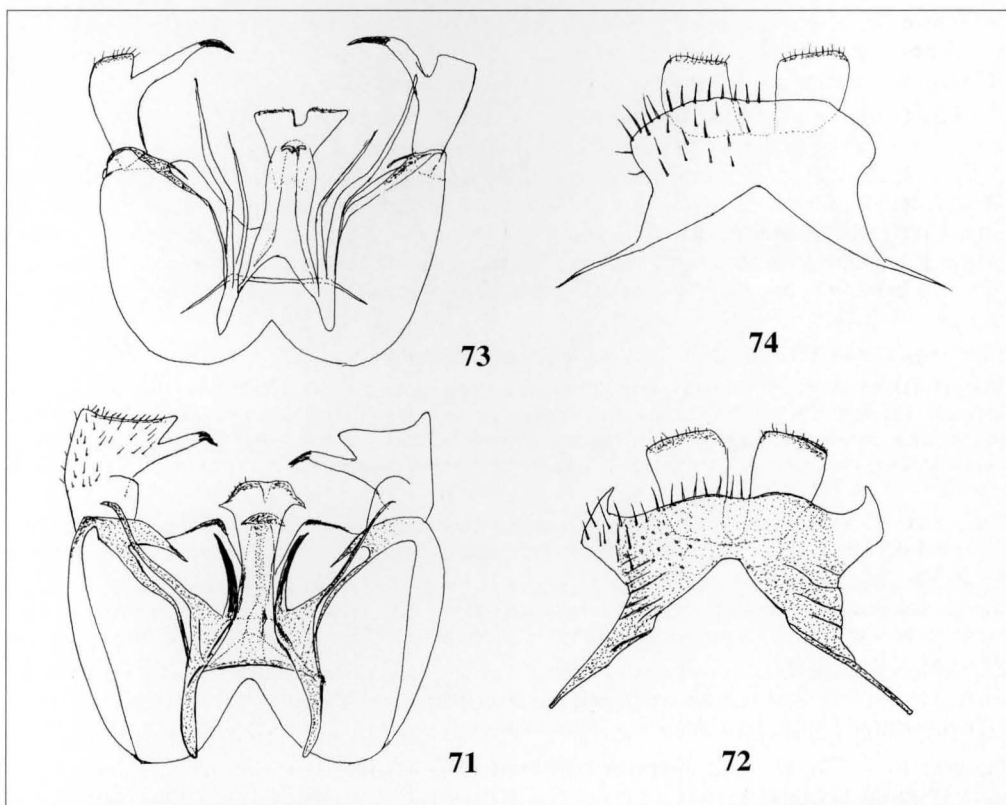
(Figs 71–72)

**Remarks.** Distribution type 1. KURINA (2004) recorded this as new to Greece, on a single female from Samos. The male genitalia (Figs 71–72), drawn from a British specimen, are figured for comparison with *A. scheria* spec. nov. This is a widespread Holarctic species.

***Allocotocera scheria* spec. nov.**

(Figs 73–74)

**Type material.** **Holotype:** ♂, GREECE, Corfu (site 9), Kavos, near monastery, 1.v.1980, leg. I. F. G. McLEAN (BMNH). **Paratypes:** 2 ♂♂, Crete (site 20), Kritsa, rocky valley, 18.iv.1980, leg. A. E. STUBBS; 1 ♂, Crete (site 27), 0.5 km north-west of Siroules, 26.iv.1980, leg. A. E. STUBBS; 1 ♂, Crete (site 29), Hliaro, by stream, 27.iv.1980, leg. A. E. STUBBS; 1 ♂, 1 ♀, Crete (site 36), Kotsifiana, by shaded stream, 16.v.1982, leg. I. F. G. McLEAN; 1 ♂, Cephalo-



**Figs 71–74:** Male genitalia of *Allocotocera* species: – **71–72:** *A. pulchella* (CURTIS): – **71:** Dorsal view of gonocoxites, gonostylus and aedeagal complex with tergite 9 and cerci removed. – **72:** Dorsal view of tergite 9 and cerci. – **73–74:** *A. scheria* spec. nov.: – **73:** Dorsal view of gonocoxites, gonostylus and aedeagal complex with tergite 9 and cerci removed. – **74:** Dorsal view of tergite 9 and cerci.

nia (site 10), Mount Enos, *Abies* forest, 1300 m, 23.v.1981, leg. I. F. G. McLEAN. **Other material:** 1 ♀, Corfu (site 12), dry gorge north of Paleocastritsa, 5.v.1980, leg. I. F. G. McLEAN. Crete: 57, 1 ♂.

**Male. Head** dark, grey dusted above ocelli, with all setae pale; face yellowish. Ocelli in a row with outer ocellus little more than its diameter from eye margin. Antenna with scape and pedicel blackish to brownish yellow; flagellum entirely black, laterally compressed with flagellomeres about as long as broad in lateral view. Palpus slender, yellow.

**Thorax** mainly shining black, but prothoracic sclerites brownish yellow and a pale yellow lateral stripe on mesonotum in front of wing base only, including notopleural area and broadened on humeral area; anterior spiracle pale yellow. Thoracic bristling yellow to dark brown, paler on yellow areas, short darker bristling on disc of mesonotum. Prothorax, laterotergite and mediotergite bearing long pale setae. **Wing** similarly marked to *A. pulchella* CURTIS, with a preapical brown patch including the tips of veins  $R_1$  and  $R_5$ . Vein Sc ends in costa well beyond level of base of  $R_s$ , sc-r at half its length. Vein  $R_1$  ends at three quarters wing length. Venation much as *A. pulchella* except that vein  $R_5$  is closer to  $R_1$  and parallel with it, then sinuous beyond tip of  $R_1$  and downturned apically. Costa extends only 0.1 distance from  $R_5$  to  $M_1$ . Median fork longer than its stem. Posterior fork begins level with base of median stalk. Vein An long but ending free. Haltere yellow. **Wing length** 3.2–3.7 mm. **Legs** mainly yellow, with hind coxa dark externally, all femora dark ventrally on basal half and hind femur dark on apical sixth. Tibial setae short and dark: mid tibia with 6–7 *a-d*, 2–3 *p-d*, 3–5 *p-v* and 3 *a-v* setae; hind tibia has 7–11 *a-d*, 7–10 *p-d* and 3–6 *p* setae on the apical half.

**Abdomen** entirely shining black except for genitalia (Figs 73–74) which are pale yellow; bristling yellowish, longer on tergites 1–2, darker on succeeding tergites. Gonostylus (Fig. 73) narrower in dorsal view, with a relatively longer internal process than in *A. pulchella*.

**Female.** Corfu female differs from males in coloration. **Thorax** more extensively yellow: humeral areas and side margins of mesonotum are yellow, leaving three fused dark brown stripes on disc; scutellum brown basally, yellow apically; prothorax yellow but otherwise pleura and mediotergite brown.

**Wing length** 3.5 mm. **Legs** yellow except brown lateral patch apically on hind coxa and narrow brown tip to hind femur. **Abdomen** with broad yellow basal markings on tergites 2–5, yellow patch on side of tergite 1, marking on 2 constricted medially but those on 3–5 complete bands about half length of tergite; 6 black with narrow yellow apical margin (indistinct in Cretan specimen); tergite 7, sternites and ovipositor yellow.

**Etymology.** The ancient name of the island of Corfu, a noun in apposition.

**Remarks.** Distribution type 10. This species differs most obviously from *A. pulchella* in being predominantly dark in colour. The male of *A. pulchella* has the thorax mainly yellow with two broad brown stripes more or less distinct posteriorly on the mesonotum, while the abdomen has tergites 1–5 mainly yellow, 1 with a dark patch and 2–5 more or less narrowly black apically; only tergites 6–7 are entirely black. The sternites in *pulchella* are also yellow and the genitalia are yellow in both species.

The female of *pulchella* usually has the thorax entirely yellow, the abdomen with tergite 1 all yellow, 2 with a dark patch dorsally, 3–5 with narrow black apical bands and only 6 all black; tergite 7, the sternites and ovipositor are yellow.

An *Allocotocera* species female from Morocco more closely resembles the Greek males in coloration, being black except for brownish margins to the mesonotum and yellow tergite 7 and ovipositor. The finding of males from North Africa would be necessary to confirm if it is conspecific.

#### *Azana (Azana) anomala* (STAEGER, 1840)

**Material.** GREECE: Mainland: SE11, 1♂. Corfu: 18, 1♂. Crete: 1, 1♂, 1♀; 5, 1♂. CYPRUS: 18, 1♂.

**Remarks.** New to Greece. Distribution type 3. It is widespread in Europe including Bulgaria (BECHEV 2002a). CHANDLER (1994) mentioned that there were local forms of this species in Cyprus and Algeria. This was based on the small differences in genital structure from British material examined of *A. anomala*, which is widely distributed in Europe. COHER (1995) described a closely related species from Corsica and more material is necessary to assess the status of these local forms of *anomala*.

#### *Azana (Azana) flavohalterata* STROBL, 1909

= *bulgarensis* COHER, 1995

**Material.** GREECE: Mainland: TH7. Paxos: 1, 1♀. Milos: 1, 7♂♂, 2♀♀. Crete: 27, 1♂; 40, 1♂; 41, 2♀♀; 42, 3♂♂, 1♀. CYPRUS: 2, 2♂♂, 1♀.

**Remarks.** Distribution type 6. The identity of *flavohalterata* was established by CHANDLER (1994) and CHANDLER & RIBEIRO (1995). CHANDLER & BLASCO-ZUMETA (2001) figured the male genitalia and mentioned that COHER (1995) had also figured it under the name *bulgarensis*. It appears to be a widespread Mediterranean species and occurrence in Crete and Cyprus was mentioned by CHANDLER (1994), who also recorded it from Israel. KURINA (2004) recorded it from Samos.

#### *Azana (Jugazana) nigricoxa* STROBL, 1898

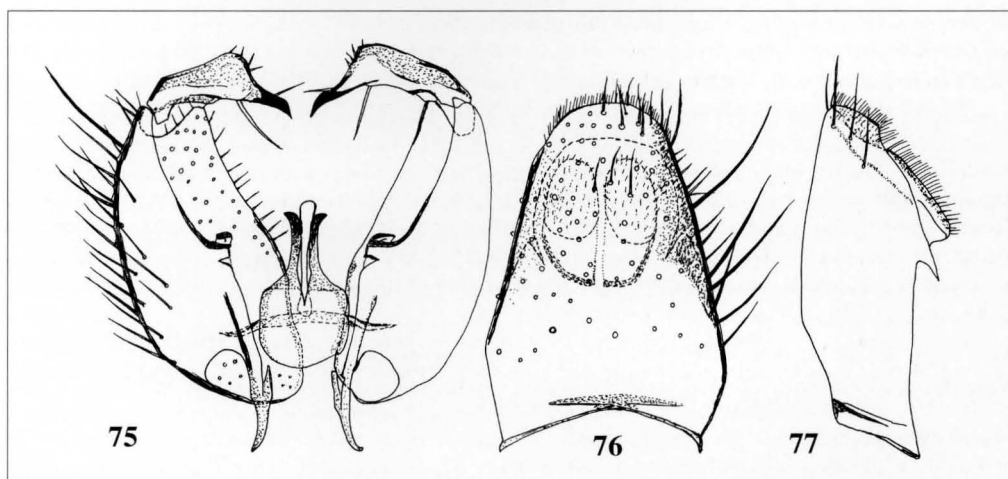
(Figs 75–77)

**Material.** GREECE: Mainland: MK29; 64; MK30; SE3, 1♂. Cephalonia: 3, 1♂. Corfu: 14, 1♂. CROATIA: Becici, 28.iv–3.v.1984, 1♂, 1♀, leg. A.E. STUBBS.

**Remarks.** New to Greece. Distribution type 8. STROBL (1898) described this species on a male from Bosnia-Herzegovina. The translation of this Serbian paper into German was published subsequently (STROBL 1900). COHER (1995) figured the genitalia of a specimen from Croatia and proposed the new subgenus *Jugazana* to recognise the marked difference in genital structure from other species of the genus. The male genitalia are also figured here (Figs 75–77). BECHEV (2003) records it from Bulgaria.

#### *Monoclona rufilatera* (WALKER, 1837)

**Material.** GREECE: Mainland: SE14, 1♀. Peloponnese: 6, 1♀. Corfu: 5, 1♀. CYPRUS: 57, 1♀.



**Figs 75–77:** Male genitalia of *Azana nigricoxa* STROBL: – 75: Dorsal view of gonocoxites, gonostylus and aedeagal complex with tergite 9 and cerci removed. – 76: Dorsal view of tergite 9 and cerci (beneath). – 77: Lateral view of tergite 9 and cerci.

**Remarks.** New to Greece and Cyprus. Distribution type 1. This is a Holarctic species, widespread in Europe and also recorded from the Caucasus (ZAITZEV 1999b).

*Neuratelia minor* (LUNDSTRÖM, 1912)

**Material.** GREECE: Peloponnese: 30, 2♂♂. Cephalonia: 3, 2♂♂; 10, 1♂. Corfu: 9, 1♀; 14, 1♂, 1♀. CYPRUS: 18, 1♂, 1♀; 30, 1♂; 37, 1♂, 2♀♀; 56, 1♂.

**Remarks.** Distribution type 3. A mainly Mediterranean species, widespread in southern Europe and known from Israel. CHANDLER (1994) mentioned that there were records from Cephalonia, Crete and Cyprus. ZAITZEV (1994) recorded it from the Krasnodarsk region of Russia.

*Neuratelia nemoralis* (MEIGEN, 1818)

**Material.** GREECE: Mainland: MK14; MK19; MK22.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species with a wide distribution in Europe.

*Neuratelia spinosa* MATILE, 1974

**Material.** GREECE: Peloponnese: 17, 2♂♂.

**Remarks.** New to Greece. Distribution type 6. It was described from Corsica (MATILE 1974) and not until now recorded elsewhere. It possibly has a wider Mediterranean distribution.

*Polylepta zonata* (ZETTERSTEDT, 1852)

**Material.** GREECE: Cephalonia: 9, 1♂.

**Remarks.** New to Greece. Distribution type 4. Following the synonymy with *P. meridionalis* BECHEV (KURINA 2003), this is apparently a widespread species in Europe, but less common than *P. guttiventris* (ZETTERSTEDT, 1852).

*Sciophila delphis* CHANDLER, 2001

**Type material. Holotype:** ♂, GREECE, Fokis, Delphi, 5.v.1979, leg. A. E. STUBBS (BMNH).

**Remarks.** Distribution type 10. This species is known only from the holotype and is one of several species in the *lutea* MACQUART group recognised from the Mediterranean region by CHANDLER & BLASCO-ZUMETA (2001).

*Sciophila eryngii* CHANDLER, 1994

**Material.** CYPRUS: 44, 1♂; 51, 1♀.

**Remarks.** New to Cyprus. Distribution type 9. This species, also a member of the *lutea* group, was described from Israel. Its presence on Cyprus is particularly interesting in view of the close relationship to *S. pandora* spec. nov., described below from Crete.



*Sciophila pandora* spec. nov.

*Sciophila kashmirensis* ZAITZEV, 1982 sensu CASPERS, 1991: 324, Figs 5–6.

**Type material.** **Holotype:** ♂, GREECE, Crete (site 5), Ierapetra, 18.iv.1971, leg. H. MALICKY (ZSM). **Paratypes:** 1 ♂, GREECE: Crete (site 18), Knossos, lane to south, 28.iv.1980, leg. A. E. STUBBS; 1 ♂, Crete (site 46), Vai Palm Forest, 21.v.1982, leg. I. F. G. McLEAN. **Other material.** GREECE: Crete: 53, 2 ♂♂, 1 ♀.

**Male.** **Head** dark brown, grey dusted. Antenna with scape, pedicel and base of first flagellomere yellow; flagellum otherwise brown, with median flagellomeres about 3 times as long as broad. Palpus yellow.

**Thorax** orange yellow, with three vaguely darker stripes on mesonotum. **Wing** with both macrotrichia and microtrichia evenly distributed on membrane. **Wing length** 3.6 mm. **Legs** yellow, with all setae on coxae and femora, tibial setulae and spurs yellow. Mid tibia with 3–4 *a*, 2 *p-d*, 1 *p* and 3 *p-v* setae. Hind tibia with 5 *a*, 5 *d* and 5 *p-d* setae. 4 *p* setae on apical third.

**Abdomen** orange yellow. Genitalia (CASPERS 1991, Figs 5–6) yellow; gonocoxal apodeme with a bifurcate apical process, the outer lobe longer and pointed externally; dorsal lobe of gonocoxites evenly rounded and bearing 2 long setae on its internal margin.

**Female.** Not examined.

**Etymology.** The name is chosen to acknowledge the rich speciation only recently revealed in this and some other groups of fungus gnats in the eastern Mediterranean and is a noun in apposition.

**Remarks.** Distribution type 10. This species closely resembles other members of the *S. lutea* MACQUART group in all non-genital characters. CASPERS (1991) identified it with *S. kashmirensis*, but his figures of the genitalia showed differences as great as between other more recently recognised species of the group described by CHANDLER (1994) and CHANDLER & BLASCO-ZUMETA (2001). Among these species it is closest to *S. eryngii* CHANDLER described from Israel and here recorded from Cyprus, but has the outer fork of the gonocoxal apodeme out-turned, while it is pointed internally in *eryngii*. *Sciophila pandora* is known only from Crete.

## Subfamily Mycetophilinae

## Tribe Exechiini

*Allodia (Allodia) lugens* (WIEDEMANN, 1817)

**Material.** GREECE: Peloponnese: 29, 1 ♂. CYPRUS: 11, 1 ♂; 15, 1 ♂; 56, 1 ♂.

**Remarks.** New to Greece and Cyprus. Distribution type 1. This is a common Holarctic species and is recorded from the Caucasus (JOOST & PLASSMANN 1976).

*Allodia (Allodia) ornaticollis* (MEIGEN, 1818)

**Material.** GREECE: Corfu: 17, 1 ♂. CYPRUS: 51, 1 ♂.

**Remarks.** New to Greece and Cyprus. Distribution type 1. This is a Holarctic species (ZAITZEV 1999b), common in Europe including the Mediterranean region and Caucasus; it is also known from the Canary Islands and Madeira (CHANDLER & RIBEIRO 1995).

*Allodia (Brachycampta) alternans* (ZETTERSTEDT, 1838)

**Material.** GREECE: Mainland: TH9, 1 ♂. CYPRUS: 51, 1 ♂.

**Remarks.** New to Greece and Cyprus. Distribution type 1. This is a widespread Holarctic species (ZAITZEV 1999b).

*Allodia (Brachycampta) pistillata* (LUNDSTRÖM, 1911)

**Material.** GREECE: Mainland: IP1, 1 ♂. Corfu: 20, 1 ♂. Crete: 29, 1 ♂, 2 ♀♀; 54, 1 ♂; 56, 1 ♂; 62, 1 ♂. CYPRUS: 11, 1 ♀; 12, 1 ♂; 13, 1 ♂.

**Remarks.** Distribution type 1. This is a Holarctic species, widespread in the Mediterranean region and was recorded from Tunisia, Israel, Turkey and Iran by CHANDLER (1994), who also mentioned that there were records from mainland Greece, Corfu, Crete and Cyprus. CHANDLER & RIBEIRO (1995) recorded it from Madeira.

*Allodiopsis rustica* (EDWARDS, 1941)

**Material.** GREECE: Mainland: MK11, 1 ♂, 1 ♀; TH7, 2 ♂♂; SE7, 1 ♂. Peloponnese: 12, 1 ♀; 15, 1 ♀; 19, 1 ♀; 26, 1 ♂; 29, 1 ♀; 31, 5 ♂♂, 5 ♀♀; 34, 1 ♂, 1 ♀.

**Remarks.** New to Greece. Distribution type 2. This is a Palaearctic species, widespread in Europe and the Mediterranean region, including an unpublished record for Tunisia.

***Anatella ankeli* PLASSMANN, 1977**

**Material.** GREECE: Crete: 49, 2♂♂, 1♀.

**Remarks.** New to Greece. Distribution type 4. This is a widespread but uncommon species in Europe.

***Brevicornu fuscipenne* (STAEGER, 1840)**

**Material.** GREECE: Peloponnese: 26, 1♂.

**Remarks.** New to Greece. Distribution type 1. This is a widespread Holarctic species (ZAITZEV 1999b).

***Brevicornu griseicolle* (STAEGER, 1840)**

**Material.** GREECE: Mainland: SE9, 1♂. Peloponnese: 7; 12, 10♂♂; 17, 1♂; 26, 1♂; 34, 1♂. Cephalonia: 3, 4♂♂; 8, 3♂♂; 10, 1♂. Corfu: 12, 4♂♂; 17m 3♂♂; 18, 1♂. Euboa: 2, 1♂; 4, 1♂. Thasos: 1, 4♂♂; 5, 1♂. Chios: 4, 1♂. Samos: 1, 1♂. Crete: 3, 3.v.1971, 1♂; 3, 20.v.1977, 2♂♂; 9, 2♂♂; 34, 1♂; 55, 1♂. CYPRUS: 21, 2♂♂; 24, 1♂; 36, 1♂; 40, 1♂; 52, 1♂.

**Remarks.** New to Cyprus. Distribution type 1. This species is widespread in the Holarctic (ZAITZEV 1999b). CHANDLER (1994) recorded it from Israel and Turkey and referred to presence in mainland Greece and "many of the Mediterranean islands".

***Brevicornu intermedium* (SANTOS ABREU, 1920)**

**Material.** GREECE: Mainland: MK11, 1♂; SE7, 1♂; SE9, 2♂♂. Peloponnese: 6; 7; 15, 2♂♂. Corfu: 12, 3♂♂; 17, 1♂; 18, 2♂♂. Crete: 18, 1♂; 34, 1♂; 35, 1♂; 51, 2♂♂; 55, 1♂. CYPRUS: 11, 1♂; 13, 1♂; 20, 2♂♂; 21, 5♂♂; 24, 1♂; 26, 3♂♂.

**Remarks.** New to Greece and Cyprus. Distribution type 3. This is a widespread species in Europe, but especially common in the Mediterranean region (CHANDLER 1994) and Atlantic Islands (CHANDLER & RIBEIRO 1995).

***Brevicornu sericoma* (MEIGEN, 1830)**

**Material.** GREECE: Mainland: MK11, 1♂. Peloponnese: 6, 1♂; 29, 1♂. Cephalonia: 9, 1♂. Crete: 3, 1♂; 62, 1♂. CYPRUS: 11, 4♂♂; 17, 3♂♂; 21, 1♂; 49, 2♂♂.

**Remarks.** New to Greece and Cyprus. Distribution type 1. This is a widespread Holarctic species (ZAITZEV 1999b) and is recorded from the Caucasus (JOOST & PLASSMANN 1976), Iran (MATILE 1969b), North Africa (Tunisia) and Madeira (CHANDLER & RIBEIRO 1995).

***Brevicornu verralli* (EDWARDS, 1925)**

**Material.** GREECE: Mainland: SE7, 1♂. Peloponnese: 12. Cephalonia: 5, 1♂. Euboa: 4, 11♂♂, 5♀♀. Crete: 3, 2♂♂, 1♀; 22, 1♂; 34, 1♂; 43, 1♂; 55, 1♂. CYPRUS: 2, 1♂; 11, 3♂♂; 13, 2♂♂; 16, 1♂; 17, 2♂♂; 20, 3♂♂; 21, 1♂; 26, 5♂♂, 1♀; 43, 1♂; 49, 2♂♂.

**Remarks.** Distribution type 3. This is widespread in Europe, the Atlantic Islands (CHANDLER & RIBEIRO 1995) and the Mediterranean region. CHANDLER (1994) recorded it from Tunisia and Turkey and referred to records from mainland Greece, Cephalonia, Corfu, Crete and Cyprus.

***Cordyla crassicornis* MEIGEN, 1818**

**Material.** GREECE: Mainland: IP1, 1♂; SE9, 1♂; SE11, 2♂♂. Cephalonia: 7, 1♂. Corfu: 17, 1♂; 16, 1♂; 21, 1♂. Chios: 1, 1♂. Crete: 42, 2♂♂. CYPRUS: 17, 1♂; 20, 1♂; 26, 1♂; 37, 1♂.

**Remarks.** New to Cyprus. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b) and occurs in the Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and mentioned that there was an unpublished record from Chios.

***Cordyla fasciata* MEIGEN, 1830**

**Material.** GREECE: Euboa: 2, 1♂, 1♀.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b).

***Cordyla fusca* MEIGEN, 1804**

**Material.** GREECE: Corfu: 19, 1♂.

**Remarks.** New to Greece. Distribution type 3. This is a widespread western Palaearctic species, including Bulgaria (BECHEV 2002a).

*Cordyla insons* LAŠTOVKA & MATILE, 1974

**Material.** CYPRUS: 11, 2♂♂, 1♀; 16, 1♂; 20, 1♂.

**Remarks.** New to Cyprus. Distribution type 2. This is a widespread species in the Palaearctic (ZAITZEV 1999b). Although described from Mongolia, it is now known to occur widely in Europe.

*Cordyla murina* WINNERTZ, 1863

**Material.** GREECE: Mainland: IP2, 1♂. Cephalonia: 13, 1♂. Corfu: 5, 8♂♂; 18, 1♂; 19, 4♂♂. Thasos: 5, 1♂, 2♀♀. Chios: 1, 1♂. Crete: 46, 1♂. CYPRUS: 2, 1♂; 7, 1♂; 21, 1♂; 23, 3♂♂; 37, 1♂; 41, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b). Two species have been confused under this name, as recognised by Petr LAŠTOVKA in an unpublished revision of the genus. Here the name is applied to the species figured as *murina* by ZAITZEV (in KRIVOSHEINA *et al.* 1986), which has the enlarged palpomere of the male more swollen and as long as an eye. The species figured as *murina* by EDWARDS (1925) has this palpomere distinctly smaller and small differences in the genital structure.

*Cordyla nitidula* EDWARDS, 1925

**Material.** GREECE: Chios: 1, 1♂, 3♀♀. Samos: 1, 1♂, 1♀.

**Remarks.** New to Greece. Distribution type 3. This species is widespread in the western Palaearctic, including Bulgaria (BECHEV 2002a).

*Cordyla styliforceps* (BUKOWSKI, 1934)

**Material.** GREECE: Peloponnese: 23, 1♂, 7.xii.1983; 23, 1♂, 26.xii.1983.

**Remarks.** New to Greece. Distribution type 7. It is a mainly Mediterranean species, described from the Ukraine (Crimea) but now known from Israel (CHANDLER 1994), the Iberian peninsula (CARLES-TOLRÁ 2002) and Canary Islands (CHANDLER & RIBEIRO 1995).

*Exechia dorsalis* (STAEGER, 1840)

**Material.** GREECE: Crete: 27, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic (ZAITZEV 1999b) and occurs commonly in Europe.

*Exechia fulva* SANTOS ABREU, 1920

**Material.** GREECE: Mainland: MK1, 1♂; TH7, 1♂; SE2, 1♂, 2♀♀. Peloponnese: 8; 12, 16♂♂, 6♀♀; 13, many ♂♂ and ♀♀; 14, 9♂♂, 7♀♀. Corfu: 12, 1♂. Andros: 1, 1♀. Naxos: 1, 1♂. Rhodes: 2, 2♂♂, 1♀. CYPRUS: 11, 2♂♂; 14, 2♂♂; 16, 1♂; 17, 2♂♂; 18, 3♂♂; 21, 2♂♂; 23, 1♂; 24, 1♂; 26, 2♂♂; 27, 2♂♂; 30, 2♂♂; 31, 3♂♂; 37, 6♂♂; 39, 2♂♂; 43, 1♂; 49, 9♂♂; 51, 1♂; 54, 8♂♂, 3♀♀.

**Remarks.** Distribution type 7. This is frequent in southern Europe, including Bulgaria (BECHEV 2002a) and the Mediterranean region and it occurs in the Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and referred to unpublished records from Turkey, mainland Greece, Corfu, Andros, Naxos, Rhodes and Cyprus.

*Exechia fusca* (MEIGEN, 1804)

**Material.** GREECE: Mainland: TH7, 1♂; SE9, 1♂. Peloponnese: 21, 1♂; 26, 1♂. Cephalonia: 1, 1♂. Samos: 1, 1♂; Crete: 51, 1♂; 55, 1♂. CYPRUS: 16, 1♂; 26, 1♂; 38, 1♂; 43, 3♂♂, 3♀♀; 52, 1♂.

**Remarks.** Distribution type 1. This is a common Holarctic species (ZAITZEV 1999b), widespread in the Mediterranean region and Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and Tunisia, mentioning that there were unpublished records from Cephalonia, Samos, Crete and Cyprus.

*Exechia lundstroemi* LANDROCK, 1923

**Material.** CYPRUS: 47, 1♂.

**Remarks.** New to Cyprus. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b).

*Exechia nigroscutellata* LANDROCK, 1912

**Material.** GREECE: Crete: 27, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, reaching the Caucasus, Mongolia and the Far East of Russia (ZAITZEV 1999b).

*Exechia separata* LUNDSTRÖM, 1912

**Material.** GREECE: Peloponnese: 32, 1♂. CYPRUS: 2, 1♂, 1♀; 6, 1♂; 11, 2♂♂, 1♀; 13, 1♀; 16, 3♂♂, 2♀♀; 21, 3♂♂, 2♀♀; 23, 1♂, 1♀; 24, 1♂, 2♀♀; 30, 1♂; 38, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is widespread in the Palaearctic (ZAITZEV 1999b) and recorded from Algeria and Israel by CHANDLER (1994), who mentioned unpublished records from Cyprus.

*Exechia seriata* (MEIGEN, 1830)

**Material.** GREECE: Crete: 29, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, reaching Japan (ZAITZEV 1999b).

*Exechiopsis corona* CHANDLER & RIBEIRO, 1995

**Type material.** Paratype: ♂, GREECE, Naxos, near Koronis, close to spring brook, light trap, 26–28.x.1980, leg. H. MALICKY (ZSM). **Other material.** CYPRUS: 54, 1♂.

**Remarks.** New to Cyprus. Distribution type 7. This species is otherwise known only on the holotype from Tenerife. A wide distribution in the region, however, now seems likely.

*Exechiopsis intersecta* (MEIGEN, 1818)

**Material.** GREECE: Mainland: SE3, 1♂.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in Europe, including Bulgaria (BECHEV 2002a).

*Exechiopsis jenkinsoni* (EDWARDS, 1925)

**Material.** GREECE: Peloponnese: 19, 1♂.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in Europe.

*Exechiopsis oltenica* (BURGHELE-BALACESCO, 1965)

**Material.** GREECE: Mainland: MK4, 1♂.

**Remarks.** New to Greece. Distribution type 8. This is an uncommon species, described from Rumania (BURGHELE-BALACESCO 1965) and known only from central and southern Europe.

*Exechiopsis pseudindecisa* LAŠTOVKA & MATILE, 1974

**Material.** GREECE: Euboa: 2, 1♂. Chios: 2, 3♂♂, 1♀. Lesbos: 3, 1♂. Crete: 20, 3♂♂. CYPRUS: 11, 6♂♂, 1♀; 16, 3♂♂, 1♀; 18, 7♂♂, 2♀♀; 20, 3♂♂; 21, 1♂, 2♀♀; 27, 1♀; 30, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 2. This is a widespread species in the Palaearctic, described from Mongolia but previously confused with *E. indecisa* WALKER in Europe and also recorded from Armenia (ZAITZEV 1999b).

*Exechiopsis vizzavonensis* (EDWARDS, 1928)

**Material.** GREECE: Mainland: TH1, 1♂, 1♀. Crete: 49, 1♂. CYPRUS: 11, 1♀; 16, 1♂, 1♀; 18, 5♂♂, 9♀♀.

**Remarks.** New to Greece and Cyprus. Distribution type 6. This is a mainly Mediterranean species, recorded from southern Europe including Bulgaria (BECHEV 2002a) and Algeria (BURGHELE-BALACESCO 1966).

*Notolopha cristata* (STAEGER, 1840)

**Material.** GREECE: Mainland: MK11, 1♂; MK12, 1♀. Peloponnese: 21, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic but following this revision of the Palaearctic species by ZAITZEV & MAXIMOVA (2000), it requires confirmation whether North American records are conspecific.

*Pseudexechia trisignata* (EDWARDS, 1913)

**Material.** GREECE: Corfu: 17, 1♂. CYPRUS: 11, 2♂♂, 1♀; 17, 1♀; 21, 1♂; 26, 1♀.

**Remarks.** Distribution type 2. This is widespread in the Palaearctic, including the Mediterranean region and Azerbaijan (ZAITZEV 1999b). CHANDLER (1994) recorded it from Turkey, Israel and Tunisia, also mentioning that there were records from Corfu and Cyprus.

*Pseudexechia trivittata* (STAEGER, 1840)

**Material.** GREECE: Mainland: IP3, 1 ♂

**Remarks.** New to Greece. Distribution type 3. This is a widespread species in Europe, including the Mediterranean region (CHANDLER & GATT 2000) and also occurs in the Canary Islands (CHANDLER & RIBEIRO 1995).

*Rymosia affinis* WINNERTZ, 1863

**Material.** GREECE: Mainland: MK2, 1 ♂, 2 ♀ ♀; MK4, 1 ♂; SE3, 1 ♂. Peloponnese: 13, 1 ♂; 31, 1 ♀. Cephalonia: 3, 4 ♂ ♂, 1 ♀; 10, 1 ♂. CYPRUS: 11, 4 ♂ ♂, 4 ♀ ♀; 16, 1 ♂, 1 ♀; 17, 1 ♂; 18, 2 ♀ ♀; 24, 1 ♂; 26, 1 ♂, 1 ♀; 30, 1 ♀; 38, 1 ♂; 41, 3 ♂ ♂, 3 ♀ ♀; 49, 2 ♂ ♂, 2 ♀ ♀; 51, 2 ♂ ♂; 52, 1 ♂.

**Remarks.** Distribution type 3. This is widespread in Europe and the Mediterranean region, including Algeria (BURGHELE-BALACESCO 1966). CHANDLER (1994) recorded it from Israel and mentioned Cephalonia, Crete and Cyprus. NIELSEN (1963) recorded it from Afghanistan.

*Rymosia beaucournui* MATILE, 1963

**Material.** GREECE: Peloponnese: 12, 1 ♂. Lesbos: 5, 1 ♂. Crete: 20, 1 ♂; 55, 1 ♂.

**Remarks.** Distribution type 6. This is a Mediterranean species, known from southern France, the Iberian peninsula, North Africa (Morocco, Tunisia), Malta and Israel. CHANDLER (1994) also mentioned that it occurred in mainland Greece and Crete.

*Rymosia cretensis* LUNDSTRÖM, 1911

**Material.** CYPRUS: 17, 1 ♂.

**Remarks.** New to Cyprus. Distribution type ?10. LUNDSTRÖM (1911) described this species from Crete. There are published records from Kenya (BURGHELE-BALACESCO 1966), Italy (MINELLI *et al.* 1995) and Germany (PLASSMANN & SCHACHT 2002), but these require confirmation. Confusion is possible with the allied species *R. pseudocretensis* BURGHELE-BALACESCO.

*Rymosia fasciata* (MEIGEN, 1804)

**Material.** GREECE: Mainland: MK4.

**Remarks.** New to Greece. Distribution type 3. This is a widespread species in Europe and has been recorded from Iran (MATILE 1969b).

*Rymosia labyrinthos* spec. nov.

(Figs 78–81)

**Type material.** Holotype: ♂, GREECE, Crete (site 27), 0.5 km north-west of Siroules, 26.iv.1980, leg. A. E. STUBBS (BMNH).

**Male.** Head brown, grey dusted, with black bristling, a row of longer setae above lateral ocellus and eye margin. Face and clypeus grey with short dark hair. Antenna with scape, pedicel and base of first flagellomere yellow; flagellum otherwise brown, with short grey hairs; flagellomeres about 3 times as long as broad. Palpus yellow.

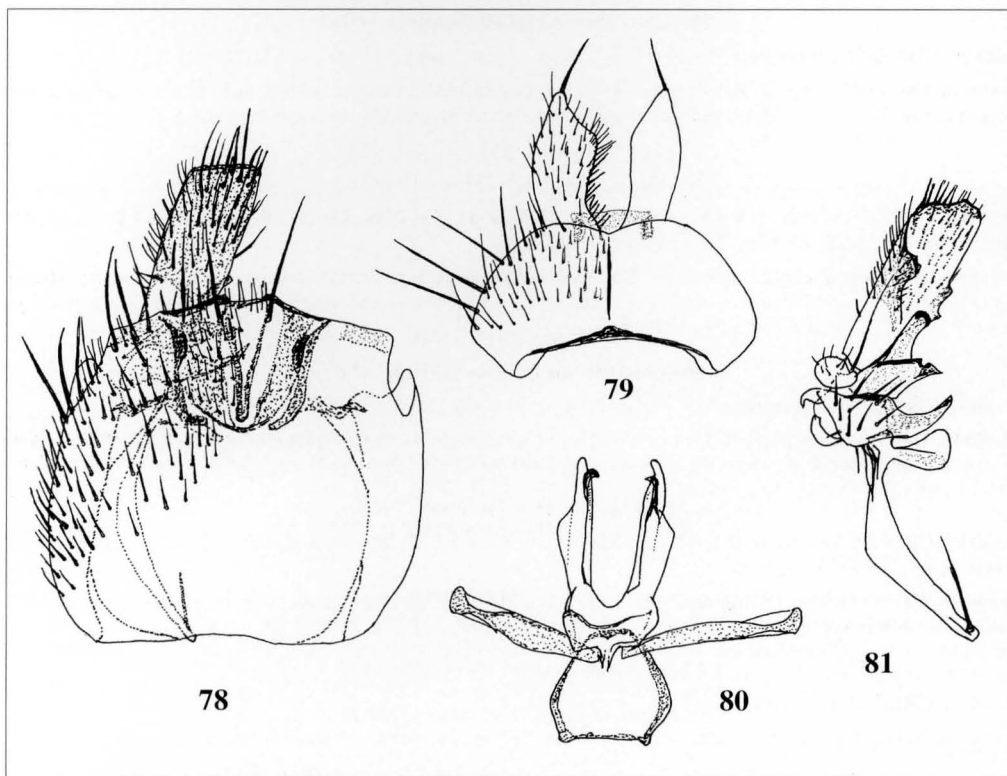
**Thorax** brown, thinly grey dusted, with all bristling dark; bearing uniform short dark setulae on mesonotum, which also bears two uniserial rows of short dorsocentrals converging behind and longer setae on fore and side margins; 1 pair of prescutellar setae, one pair of strong scutellar marginals and a pair of short weak setae on disc of scutellum. Prothorax yellow, with 3 strong setae on pronotal lobe and 1 strong proepisternal seta. Pleura yellow; mesanepisternum brownish in front, setose over most of surface. Laterotergite with strong setae. **Wing** yellowish. Vein Sc short, ending free. Crossvein r-m more than twice as long as stem of median fork Vein R<sub>5</sub>, a little downturned apically. **Wing length** of holotype 4.1 mm. **Legs** yellow, with all bristling dark. Fore metatarsus 1.2 as long as its tibia.

**Abdomen** with tergites 1–6 yellow basally, on 2–5 for half the length laterally but narrowed dorsally, 6 narrowly yellow at base; tergites 2–6 also narrowly yellow on apical margins. Genitalia (Figs 78–81) yellow with brownish gonostyli; very similar in structure to *R. affinis* but ventral lobe of gonostylus blunter with nearly straight margin apically (Fig. 78) and middle portion with internal lobe bilobed apically (Fig. 81).

**Female.** Unknown.

**Etymology.** The name is a noun in apposition, Greek for the labyrinth of ancient Crete.





**Figs 78–81:** Male genitalia of *Rymosia labyrinthos* spec. nov.: – **78:** Ventral view of gonocoxites and gonostylus. – **79:** Dorsal view of tergite 9 and cerci. – **80:** Dorsal view of aedeagal complex. – **81:** Internal view of right gonostylus.

**Remarks.** Distribution type 10. As another allied species has been examined from Turkey it appears that there is a group of species close to *R. affinis* in the eastern Mediterranean, and this species is considered sufficiently distinct to describe from a single specimen.

***Rymosia pseudocretensis* BURGHELE-BALACESCO, 1966**

**Material.** GREECE: Crete: 20, 1♂; 51, 1♂.

**Remarks.** New to Greece. Distribution type 3. This is a mainly Mediterranean species, recorded from southern Europe and Algeria (BURGHELE-BALACESCO 1966). CHANDLER (1994) recorded it from Morocco, Israel and Turkey. ZAITZEV (2003) added Tadjikistan and Uzbekistan.

***Stigmatomeria crassicornis* (STANNIUS, 1831)**

**Material.** GREECE: Mainland: MK11, 1♂, 1♀; MK12, 1♂, 1♀; SE4; SE7; SE11, 1♀. Peloponnese: 4; 15, 1♂; 26, 7♂♂, 1♀; 31, 1♂. Cephalonia: 3, 2♂♂, 2♀♀; 6, 1♂; 8, 4♂♂, 3♀♀; 10, 1♂; 11, 1♂. Corfu: 5, 1♂; 17, 1♀. Chios: 2, 2♀♀. Crete: 3, 1♂; 6, 1♂, 1♀; 15, 1♂; 20, 1♂; 29, 1♀; 34, 2♂♂, 1♀; 35, 2♀♀; 43, 4♂♂, 1♀; 54, 1♂, 1♀; 59, 1♂; 60, 1♂; 61, 1♂. CYPRUS: 4, 1♂; 20, 1♀; 21, 1♂; 26, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 1. It has a Holarctic distribution and is widespread in the Mediterranean region.

***Synplasta gracilis* (WINNERTZ, 1963)**

**Material.** GREECE: Peloponnese: 19, 1♂. Crete: 17, 1♂. CYPRUS: 11, 2♀♀.

**Remarks.** New to Greece and Cyprus. Distribution type 2. This is a widespread species in the Palaearctic, but has usually been cited under the name *excogitata* (DZIEDZICKI, 1910) and the record of that from Bulgaria (BECHEV 2002a) refers to *S. gracilis*.

*Tarnania dziedickii* (EDWARDS, 1941)

**Material.** GREECE: Peloponnese: 2, 1♂; 27, 1♂. Corfu: 1, 4♂♂, 9♀♀. Rhodes: 8, 1♂. Crete: 1, 2♂♂.

**Remarks.** Distribution type 3. This is a widespread species in western and central Europe, which regularly aestivates in caves. CHANDLER (1994) recorded it from Israel and referred to unpublished records from Corfu, Crete and Rhodes. KURINA (2004) recorded it from Cyprus.

*Tarnania fenestralis* (MEIGEN, 1818)

**Material.** GREECE: Mainland: MK4, 1♂; MK7, 1♂, 2♀♀; SE11, 1♂. Peloponnese: 6, 1♀; 19, 1♂; 34, 2♂♂, 3♀♀. Cephalonia: 3, 1♂, 1♀; 10, 1♀.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in Europe, including Bulgaria (BECHEV 2002a).

## Tribe Mycetophilini

*Dynatosoma majus* LANDROCK, 1912

**Material.** GREECE: Peloponnese: 26, 2.vi.1973, 1♂; 26, 3.vi.1975, 1♂, 2♀♀.

**Remarks.** New to Greece. Distribution type 2. This is a Palaearctic species, widespread in central and southern Europe, including Bulgaria (BECHEV 2002a) and extends to the Far East of Russia and Japan (ZAITZEV 1999b).

*Mycetophila alea* LAFFOON, 1965

**Material.** GREECE: Mainland: IP1, 1♂, 1♀; MK3, 1♂; SE7, 2♂♂. Peloponnese: 6, 1♂; 7; 15, 1♀. Corfu: 5, 1♂. Samos: 1, 1♂. Crete: 27, 2♂♂, 1♀.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species (LAFFOON 1957; as *guttata* DZIEDZICKI, 1886) and is common in Europe.

*Mycetophila blanda* WINNERTZ, 1863

**Material.** GREECE: Mainland: SE1, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic (ZAITZEV 1999a).

*Mycetophila britannica* LAŠTOVKA & KIDD, 1975

**Material.** GREECE: Mainland: MK12, 1♂, 1♀; SE3; SE4; SE7, 2♂♂; SE9, 1♀. Peloponnese: 6; 13, 1♂, 3♀♀; 17, 1♂. Corfu: 11, 1♂. Crete: 20, 1♂, 1♀; 29, 1♂; 31, 1♂; 58, 1♂. CYPRUS: 11, 6♂♂; 13, 2♂♂; 16, 2♂♂; 17, 1♂; 18, 1♂; 20, 3♂♂; 21, 3♂♂, 1♀; 24, 1♂; 26, 8♂♂; 30, 10♂♂, 8♀♀; 31, 5♂♂, 5♀♀; 37, 1♂, 1♀; 43, 1♂, 1♀; 49, 1♂; 51, 1♀; 55, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 3. This species was described from Britain but it has since been found to be the commonest species of the *ruficollis* MEIGEN Group in the Mediterranean region (CHANDLER 1994) and also occurs in the Atlantic Islands (CHANDLER & RIBEIRO 1995).

*Mycetophila czizekii* LANDROCK, 1911

**Material.** GREECE: Mainland: SE1, 1♂; SE9, 1♂. Peloponnese: 6, 1♂; 8; 17, 1♂. Cephalonia: 3, 1♂, 1♀; 7, 1♂, 1♀. Corfu: 12, 1♂; 14, 1♀. Chios: 2, 1♀. CYPRUS: 11, 3♂♂; 16, 2♂♂; 17, 1♀; 20, 2♂♂; 21, 2♂♂, 3♀♀; 23, 3♂♂, 2♀♀; 24, 3♂♂, 2♀♀; 31, 1♂; 43, 1♀; 52, 3♂♂.

**Remarks.** Distribution type 4. This is probably widespread in Europe but has been confused with the similar species *M. sordida* VAN DER WULP. It has been recorded from Corsica (MATILE 1977a), Montenegro (COE 1962a) and Bulgaria (BECHEV 2002a). The reference by CHANDLER (1994) to *sordida* occurring in mainland Greece and Cyprus, related to *M. czizekii*.

*Mycetophila formosa* LUNDSTRÖM, 1911

**Material.** GREECE: Mainland: MK11, 1♀. Crete: 1, 12♂♂, 9♀♀; 3, 2♂♂, 1♀; 11, 1♂, 1♀; 29, 1♂, 1♀; 61, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, including Iran (LAŠTOVKA & MATILE 1969).

*Mycetophila luctuosa* MEIGEN, 1830

**Material.** GREECE: Mainland: TH4, 15.vi.1979, 1♂; TH4, 13.x.1980, 3♂♂, 1♀.

**Remarks.** New to Greece. Distribution type 1. This is a widespread Holarctic species (LAFFOON 1957).

*Mycetophila marginata* WINNERTZ, 1863

**Material.** GREECE: Mainland: SE3, 1♂; SE9, 1♂. Peloponnese: 17, 7♂♂; 29, 1♂, 2♀♀; 31, 1♂. Euboa: 4, 5♂♂, 4♀♀. Ikaria: 1, 4♂♂, 2♀♀. Andros: 2, 1♂, 1♀. Crete: 27, 3♂♂; 36, 1♀; 43, 2♂♂, 2♀♀; 54, 1♂. CYPRUS: 8, 1♂. 11,

1♂; 16, 1♂; 17, 1♂; 18, 1♂; 20, 1♀; 21, 10♂♂, 3♀♀; 26, 1♂; 30, 1♂; 31, 1♂; 37, 1♂, 1♀; 41, 1♂; 49, 6♂♂, 2♀♀; 50, 1♂; 54, 2♂♂, 1♀; 56, 2♂♂.

**Remarks.** New to Greece and Cyprus. Distribution type 4. This is a widespread species in Europe.

*Mycetophila mitis* (JOHANNSEN, 1912)

**Material.** GREECE: Crete: 56, 1♂; 62, 1♂.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species, which CHANDLER (1994) recorded from Israel.

*Mycetophila occultans* LUNDSTRÖM, 1913

**Material.** GREECE: Crete: 3, 2♂♂, 1♀; 29, 2♂♂; 56, 1♂; 60, 2♂♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in Europe, including Bulgaria (BECHEV 2002a) and reaches the Far East of Russia (ZAITZEV 2003).

*Mycetophila ocellus* WALKER, 1848

**Material.** CYPRUS: 11, 2♂♂; 16, 1♂; 17, 1♂; 18, 1♀; 20, 1♂; 21, 4♂♂, 1♀; 26, 1♂, 1♀; 30, 2♂♂, 2♀♀; 37, 1♂; 49, 7♂♂, 6♀♀; 51, 2♀♀; 52, 1♂; 53, 1♂, 1♀; 54, 2♂♂, 2♀♀; 56, 3♂♂.

**Remarks.** Distribution type 1. This is a very common and widespread Holarctic species (LAFFOON 1957), occurring in the Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and Turkey, also mentioning that there was an unpublished record for Cyprus. Absence of Greek records is surprising.

*Mycetophila ornata* STEPHENS, 1846

**Material.** GREECE: Mainland: MK1, 1♀. Corfu: 14, 1♀.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, reaching the Far East of Russia (ZAITZEV 1999b).

*Mycetophila perpallida* (CHANDLER, 1993)

**Material.** GREECE: Peloponnese: 8; 23, 2♂♂; 31, 1♂. Crete: 27, 1♂; 51, 1♂; 60, 2♂♂.

**Remarks.** Distribution type 3. KURINA (2004) recorded this as new to mainland Greece. It is widespread in Europe and in most of its range sympatric with *M. fungorum* (DE GEER, 1776) but evidently predominates in the Mediterranean region (CHANDLER 1993).

*Mycetophila pictula* MEIGEN, 1830

**Material.** GREECE: Cephalonia: 8, 1♀; 10, 2♂♂. Corfu: 10, 1♂; 11, 1♀. Chios: 2, 1♂. Crete: 27, 1♀; 29, 1♀; 30, 1♂; 34, 3♂♂; 43, 1♂, 2♀♀. CYPRUS: 11, 2♂♂; 16, 1♂, 1♀; 17, 4♂♂; 18, 1♂, 1♀; 20, 4♂♂; 21, 17♂♂, 8♀♀; 26, 2♂♂, 1♀; 30, 1♂; 36, 1♀; 37, 1♂; 47, 2♂♂; 49, 1♂.

**Remarks.** Distribution type 1. This is a widespread Holarctic species, which is common in the Mediterranean region. CHANDLER (1994) recorded it from Israel and Turkey and mentioned that there were records from Cephalonia, Corfu, Chios, Crete and Cyprus.

*Mycetophila pumila* WINNERTZ, 1863

**Material.** GREECE: Cephalonia: 6, 1♂. Crete: 54, 1♂; 56, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in Europe including Bulgaria (BECHEV 2002a) and is also known from Iran (LAŠTOVKA & MATILE 1969) and the Atlantic Islands (Canary Islands and Madeira) (CHANDLER & RIBEIRO 1995). Zaitzev (1999b) recorded it from Sakhalin.

*Mycetophila signatoides* DZIEDZICKI, 1884

= *assimilis* MATILE, 1967 (new name for *conformis* MATILE, 1963, preocc.)

**Material.** GREECE: Mainland: TH4, 1♂.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in the western Palaearctic. Since the description of *assimilis* by MATILE (1963, as *conformis*) that name has often been applied to it in the literature and is used in the recent revision of the *signata* MEIGEN Group by ZAITZEV (1999a), who identified another northern European species as *signatoides*. The figures by DZIEDZICKI (1884), however, fit the present species and MATILE described it as new because the figures of *signatoides* by LAFFOON (1957), who considered it a Holarctic species, did not agree.

*Mycetophila spectabilis* WINNERTZ, 1863

**Material.** GREECE: Mainland: MK10, 1♂; SE7, 1♂. Peloponnese: 6, 1♂; 7; 8, 1♂; 12, 2♂♂. Chios: 6, 1♂. CYPRUS: 21, 1♂; 26, 1♂.

**Remarks.** Distribution type 3. This is a widespread species in Europe including Bulgaria (BECHEV 2002a), also recorded from Turkey and Israel by CHANDLER (1994), who stated that there were unpublished records from mainland Greece, Chios and Cyprus.

***Mycetophila stolidus* WALKER, 1856**

**Material.** GREECE: Peloponnese: 10, 1 ♀.

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species (LAFFOON 1957) that is widespread in Europe and has been recorded from Iran (LAŠTOVKA & MATILE 1969).

***Mycetophila strigatoides* (LANDROCK, 1927)**

**Material.** GREECE: Crete: 56, 1 ♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species, known to occur in North Africa, Israel and Turkey (CHANDLER 1994).

***Mycetophila tridentata* LUNDSTRÖM, 1911**

**Material.** GREECE: Crete: 53, 1 ♂. CYPRUS: 54, 1 ♂; 65, 1 ♂.

**Remarks.** New to Greece and Cyprus. Distribution type 3. This is widespread in western and central Europe, extending to the Balkans and Caucasus but has not previously been recorded from the Mediterranean region.

***Mycetophila trinotata* STAEGE, 1840**

**Material.** CYPRUS: 30, 1 ♀.

**Remarks.** New to Cyprus. Distribution type 1. This is a widespread Holarctic species (LAFFOON 1957), which is known from Iran (LAŠTOVKA & MATILE 1969) and there is an unpublished record for Turkey.

***Mycetophila unicolor* STANNIUS, 1831**

**Material.** GREECE: Mainland: MK5. Crete: 3, 2 ♀ ♀; 6, 1 ♂, 1 ♀; 10, 1 ♂; 15, 1 ♂; 27, 2 ♂ ♂, 2 ♀ ♀; 29, 1 ♂.

**Remarks.** Distribution type 3. This occurs widely in Europe and has been recorded from the Canary Islands by CHANDLER & RIBEIRO (1995), Turkey and Israel by CHANDLER (1994), who stated that it had been examined from Crete.

***Mycetophila vittipes* ZETTERSTEDT, 1852**

**Material.** GREECE: Mainland: SE3, 1 ♂. Peloponnese: 6, 1 ♀.

**Remarks.** New to Greece. Distribution type 2. This species is widespread in the Palaearctic including the Canary Islands (CHANDLER & RIBEIRO 1995).

***Phronia basalis* WINNERTZ, 1863**

**Material.** GREECE: Crete: 7, 1 ♂; 20, 1 ♂. CYPRUS: 11, 2 ♂ ♂; 27, 1 ♂, 1 ♀; 28, 1 ♂; 30, 8 ♀ ♀; 37, 2 ♀ ♀.

**Remarks.** Distribution type 3. This is a common species in Europe including Bulgaria (BECHEV 2002a) and the Mediterranean region. CHANDLER (1994) cited it from Algeria, Israel and Turkey, also referring to unpublished records from Crete and Cyprus.

***Phronia biarcuata* (BECKER, 1908)**

**Material.** GREECE: Mainland: SE3. Peloponnese: 6, 1 ♂, 1 ♀; 8, 21, 1 ♀. CYPRUS: 11, 3 ♂ ♂; 16, 1 ♂; 17, 2 ♂ ♂; 18, 1 ♂; 24, 1 ♂; 26, 3 ♂ ♂; 30, 1 ♂; 31, 1 ♂; 37, 1 ♂; 50, 1 ♂.

**Remarks.** New to Greece. Distribution type 2. This species is widespread in the Palaearctic (ZAITZEV 1999b), including the Mediterranean region and the Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) referred to its occurrence in Morocco, Tunisia, Sardinia, Sicily, Israel, Turkey and Cyprus.

***Phronia conformis* (WALKER, 1856)**

**Material.** GREECE: Mainland: SE7, 1 ♂. Peloponnese: 26, 1 ♂

**Remarks.** New to Greece. Distribution type 1. This is a Holarctic species (GAGNÉ 1975) that is widespread in Europe.

***Phronia exigua* (ZETTERSTEDT, 1852)**

**Material.** GREECE: Mainland: SE7, 1 ♂. Peloponnese: 7. Cephalonia: 3, 1 ♂. Corfu: 18, 1 ♂.

**Remarks.** New to Greece. Distribution type 1. This too is a Holarctic species (GAGNÉ 1975) that is widespread in Europe and the Mediterranean region and occurs in Madeira (CHANDLER & RIBEIRO 1995). There is an unpublished record for Tunisia.

***Phronia nitidiventris* (VAN DER WULP, 1859)**

**Material.** GREECE: Corfu: 5, 2♂♂. Crete: 27, 1♂; 60, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b), common in Europe and present in the Caucasus (JOOST & PLASSMANN 1979). It is also known from Madeira (CHANDLER & RIBEIRO 1995).

***Phronia petulans* DZIEDZICKI, 1889**

**Material.** GREECE: Peloponnese: 26, 3♂♂, 1♀.

**Remarks.** New to Greece. Distribution type 1. This is an uncommon Holarctic species (GAGNÉ 1975).

***Phronia signata* WINNERTZ, 1863**

**Material.** GREECE: Mainland: SE9, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread species in the Palaearctic, reaching the Far East of Russia and occurring in the Caucasus (ZAITZEV 1999b).

***Phronia tenuis* WINNERTZ, 1863**

**Material.** GREECE: Mainland: SE7, 3♂♂. Peloponnese: 8, 2♂♂; 17, 1♂; 31, 1♂. Corfu: 12, 1♂. Milos: 1, 1♂. Crete: 15, 1♂; 43, 11♂♂; 50, 1♂. CYPRUS: 11, 3♂♂; 16, 5♂♂; 17, 1♂; 20, 4♂♂; 21, 6♂♂; 24, 1♂; 26, 3♂♂.

**Remarks.** Distribution type 1. This is a Holarctic species (GAGNÉ 1975), common in Europe and the Mediterranean region. CHANDLER (1994) recorded it from Algeria, Tunisia, Israel and Turkey, also referring to unpublished records from Corfu, Crete and Cyprus.

***Phronia tyrrhenica* EDWARDS, 1928**

**Material.** GREECE: Euboa: 4, 2♂♂. CYPRUS: 16, 1♂; 17, 1♂; 30, 1♂.

**Remarks.** Distribution type 5. This species was described from Corsica. CASPERS (1991) cited records for mainland France, Euboa and Cyprus.

***Phronia willistoni* DZIEDZICKI, 1889**

= *incisa* CASPERS, 1991, **syn. nov.**

**Type material.** **Holotype**♂ of *Phronia incisa* CASPERS, TURKEY, Western Taurus mountains, Murtici, about 600 m, 16.v.1984, leg. N. CASPERS (ZSM).

**Other material.** GREECE: Peloponnese: 13, 1♂, 3♀♀. Euboa: 2, 1♂. Crete: 43, 1♂; 48, 1♂.

**Remarks.** New to Greece. Distribution type 1. CASPERS (1991) described *Phronia incisa* from a single male from Turkey and commented on differences in the structure of the genitalia from other members of the genus. However, comparison of the holotype with other material from various parts of the Mediterranean region has suggested that it is conspecific with *P. willistoni* Dziedzicki. This is a Holarctic species, which shows much local variation in its genital structure according to GAGNÉ (1975). It is widespread in Europe although absent from the British Isles.

***Sceptonia cryptocauda* CHANDLER, 1991**

**Material.** GREECE: Cephalonia: 6, 1♂. Corfu: 5, 16♂♂, 2♀♀.

**Remarks.** Distribution type 3. This is widespread in the western Palaearctic, with records from Israel and Iran (CHANDLER 1994) as well as various parts of Europe. BECHEV (1995) recorded it from Corfu.

***Sceptonia flavipuncta* EDWARDS, 1925**

**Material.** GREECE: Mainland: IP6. Corfu: 5, 6♂♂; 18, 1♂. CYPRUS: 21, 1♂; 26, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 4. This is a widespread species in Europe (BECHEV 1995).

***Sceptonia intestata* PLASSMANN & SCHACHT, 1990**

**Material.** GREECE: Mainland: MK23; SE7, 1♂; TH3, 40♂♂, 38♀♀; Peloponnese: 15, 2♂♂, 3♀♀. Cephalonia: 6, 1♂; 8, 1♀. Corfu: 11, 1♂; 17, 2♂♂, 5♀♀; 18, 1♂. Chios: 15, 1♀. Samos: 1, 1♂. CYPRUS: 11, 1♂; 20, 1♂, 1♀; 37, 1♂; 41, 1♂, 3♀♀; 52, 1♂; 56, 1♂.

**Remarks.** New to Cyprus. Distribution type 6. CASPERS (1991) described *curvisetosa* from mainland Greece, mentioning other material from Corfu and Cephalonia. However, he acknowledged in a footnote that it was synonymous with *S. intestata*, described from Spain. CHANDLER (1994) recorded it from Israel.



*Sceptonia membranacea* EDWARDS, 1925

**Material.** GREECE: Mainland: MK21; TH3, 1♂; SE7, 2♂♂. Peloponnese: 9, 1♂; 15, 3♂♂; 26, 1♂. Cephalonia: 9, 1♂. Corfu: 12, 1♂. Euboa: 5, 5♂♂. Thasos: 2, 1♂. Lesbos: 3, 5♂♂. Samos: 1, 2♂♂. Andros: 2, 2♂♂. Crete: 3, 1♂; 60, 1♂; 63, 15♂♂, 6♀♀. CYPRUS: 37, 3♂♂; 54, 1♂; 56, 1♂.

**Remarks.** New to Cyprus. Distribution type 3. BECHEV (1995) recorded this species from Crete, as well as Turkey and several parts of Europe.

*Sceptonia nigra* (MEIGEN, 1804)

**Material.** GREECE: Mainland: MK27, 1♂. Corfu: 5, 15♂♂, 7♀♀; 12, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b).

*Sceptonia tenuis* EDWARDS, 1925

**Material.** GREECE: Corfu: 17, 1♂.

**Remarks.** Distribution type 4. BECHEV (1995) recorded this species from Corfu as well as Bulgaria. It is widespread but scarce in Europe.

*Trichonta clavigera* (LUNDSTRÖM, 1913)

**Material.** GREECE: Peloponnese: 34, 1♂.

**Remarks.** New to Greece. Distribution type 2. This is a widespread Palaearctic species (ZAITZEV 1999b).

*Trichonta vitta* (MEIGEN, 1830)

**Material.** GREECE: Corfu: 17, 1♂. Lesbos: 2, 1♂. Crete: 51, 1♂.

**Remarks.** Distribution type 1. This is a Holarctic species that is common in Europe, the Mediterranean region including Algeria (GAGNÉ 1981) and Atlantic Islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and mentioned unpublished records from Corfu and Lesbos.

*Zygomyia humeralis* (WIEDEMANN, 1817)

**Material.** GREECE: Mainland: SE7, 2♂♂; SE9 1♂. Peloponnese: 15, 1♂; 18, 1♂. Cephalonia: 3, 1♂; 9, 1♂. Thasos: 2, 1♂. Chios: 3, 1♂. Crete: 20, 1♂; 29, 1♂; 30, 3♂♂; 34, 1♂; 35, 1♂; 56, 1♂. CYPRUS: 13, 1♂; 15, 1♂; 16, 1♂; 37, 1♂; 38, 1♂; 41, 1♂; 43, 1♂; 51, 1♂; 54, 1♂.

**Remarks.** New to Greece and Cyprus. Distribution type 4. This is a common and widespread species in Europe, including Bulgaria (BECHEV 2002a).

*Zygomyia semifusca* (MEIGEN, 1818)

**Material.** GREECE: Corfu: 5, 3♂♂, 2♀♀; 10, 1♀.

**Remarks.** New to Greece. Distribution type 4. This is a widespread species in Europe, including Bulgaria (BECHEV 2002a).

*Zygomyia valeriae* CHANDLER, 1991

**Material.** GREECE: Cephalonia: 6, 1♂; 8, 1♂. Corfu: 3, 1♂; 5, 1♂. Crete: 27, 1♂, 1♀. CYPRUS: 20, 1♂; 21, 2♂♂.

**Remarks.** New to Greece and Cyprus. Distribution type 4. This is a widespread species in Europe (CHANDLER 1991), but earlier confused with *valida* WINNERTZ in collections.

*Zygomyia valida* WINNERTZ, 1863

**Material.** GREECE: Mainland: SE7, 1♂. Cephalonia: 8, 1♂. Corfu: 5, 2♂♂; 12m 3♂♂; 17, 1♂. Chios: 2, 1♂. Lesbos: 4, 1♂. Crete: 3, 2♂♂, 3♀♀; 20, 4♂♂; 21, 1♂; 25, 1♂; 29, 1♂; 34, 1♀; 35, 1♂, 2♀♀; 43, 1♂; 54, 1♂; 55, 8♂♂; 56, 1♂; 62, 1♂. CYPRUS: 11, 3♂♂; 12, 1♂; 13, 1♂; 14, 1♂, 1♀; 16, 1♂; 18, 2♂♂; 21, 3♂♂; 46, 1♂.

**Remarks.** Distribution type 3. This is widespread in the western Palaearctic and occurs in the Atlantic islands (CHANDLER & RIBEIRO 1995). CHANDLER (1994) recorded it from Israel and Turkey, referring to unpublished records from mainland Greece, Cephalonia, Corfu, Lesbos, Chios, Crete and Cyprus.

## Discussion

A preliminary assessment of the nature of the fauna of the eastern Mediterranean can be attempted from the above data. About two-thirds of the species recorded have a wider distribution either within Europe or more widely in the Palaearctic or Holarctic Regions. As with other Mediterranean faunas previously studied the proportion of such species is significantly greater in the subfamily Mycetophilinae, while other taxa have more species with a Mediterranean or, at least on present knowledge, even more restricted range.

The genera and species groups that have previously been identified as having diversified in the Mediterranean subregion are *Macrocera* (group with unmarked wings bearing macrotrichia on membrane), *Macrorrhyncha*, *Pyratula* (*perpusilla* group), *Orfelia* (*persimilis* group), *Docosia*, *Azana*, *Sciophila* (*lutea* group) and *Rymosia*. To these can now be added *Megophthalmidia* (two species groups represented in Greece and Cyprus). All of these, with the exception of the *Orfelia persimilis* group are represented in the Greek fauna. This latter group occurs widely in the western Mediterranean and is known from North Africa (Tunisia) and Israel so would be expected also to occur in Greece or Cyprus, but only *Orfelia* species more widely distributed in Europe have so far been found there.

The known distribution of species here recorded can be summarised as follows:

1. Holarctic (found in Europe and North America) .....	30	
2. Palaearctic (extending to the eastern part) .....	46	
3. Western Palaearctic (extending outside Europe) .....	39	
4. European (widely distributed in Europe) .....	27	
5. Central and Southern Europe .....	2	
6. Mediterranean subregion and southern Europe .....	14	
7. As previous category and Atlantic Islands .....	5	
8. Eastern Mediterranean and Balkans .....	8	
9. Eastern Mediterranean .....	4	(Cyprus and Israel or Egypt)
10. Endemic .....	26	(23 Greece, 3 Cyprus)
Total .....	201	

In general species of the subfamily Mycetophilinae tend to be more widespread and all but 11 of the 89 species in this subfamily are assigned to categories 1–4, and of those 11 four belong to *Rymosia* and three to *Exechiopsis*. Twenty-two of the 30 Holarctic species belong to this subfamily. The Palaearctic element includes all the Bolitophilidae and two of the three species of Diadocidiidae. Many bolitophilids are very widespread and the proportion of Holarctic species of these and some other groups will increase when the North American fauna is better studied. A number of Exechiini here placed in category 2 have been described from North America under other names but the synonymies are yet to be established. It is also probable that many of the species assigned to categories 3 and 4 will prove more widespread when the eastern Palaearctic fauna becomes better known.

It is likely that the categories 5–10 will change in composition with more recording from the Mediterranean subregion and other parts of the Palaearctic Region. Some at least of the species newly described here from Greece or Cyprus may prove more widespread. The occurrence of *Exechiopsis corona* in the Canary Islands as well as Naxos and Cyprus highlights the need for more study of the intervening areas. Knowledge of the Mediterranean fauna of these families is still at an early stage and it is recognised that this can only be a preliminary account of the fauna of part of the eastern Mediterranean.

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