

Faunistic and taxonomic notes of Anisopodidae, Acroceridae, Conopidae and Stratiomyidae (Diptera) collected on the Iberian Peninsula

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Abstract. Faunistic records for 35 dipterous species of Anisopodidae, Acroceridae, Conopidae and Stratiomyidae collected at various locations in mainland Spain are presented. Amongst the material, the stratiomyid *Adoxomyia dahlii* (Meigen, 1830), the conopid *Myopotta rubripes* (Villeneuve, 1909) and the acrocerid *Ogcodes schembrii* Chvála, 1980 could be cited for the first time for the Spanish fauna. Furthermore, the hitherto unknown male of *Lasiopa rufitarsis* Strobl, 1906 (Stratiomyidae) is described and its relation to *L. krkensis* Lindner, 1938 discussed.

Kurzfassung. Faunistische und taxonomische Anmerkungen zu Anisopodidae, Acroceridae, Conopidae und Stratiomyidae (Diptera) von der Iberischen Halbinsel. Faunistische Nachweise zu 35 Dipterenarten der Anisopodidae, Acroceridae, Conopidae und Stratiomyidae werden mitgeteilt. Die Tiere wurden hauptsächlich per Malaise-Falle an mehreren Lokalitäten auf dem spanischen Festland gesammelt. Der überwiegende Teil des Materials befindet sich in der Sammlung des Museo Nacional de Ciencias Naturales in Madrid. Mit der Waffenfleie *Adoxomyia dahlii* (Meigen, 1830), der Dickkopffleie *Myopotta rubripes* (Villeneuve, 1909) und der Kugelfleie *Ogcodes schembrii* Chvála, 1980 können drei, für die spanische Fauna neue Arten gemeldet werden. Zudem wird das bislang unbekannte Männchen von *Lasiopa rufitarsis* Strobl, 1906 für die Wissenschaft beschrieben und dessen Verwandtschaft zu *L. krkensis* Lindner, 1938 diskutiert.

Key words. Diptera, Anisopodidae, Acroceridae, Conopidae, Stratiomyidae, Iberian Peninsula, Spain, faunistics, taxonomy, *Lasiopa rufitarsis*.

Introduction

The Diptera of the Iberian Peninsula and Maraconesia have recently been summerized by CARLES-TOLRÁ (2002), stating 6433 species for Spain, including the Balears and Canary Islands. A grant obtained by the author through BIOD-IBERIA financed a study visit to the Museo Nacional de Ciencias Naturales in Madrid (MNCN), in order to study large quantities of Malaise trap material gathered from various locations during the past 15 years. Part of the faunistic and taxonomic results of the material obtained from this visit are presented in this paper.

Study sites

The different study sites are listed in alphabetical order. A short characterization of each individual site is given where details were available. In the species accounts, the study sites are mentioned in an abbreviated way only, as annotated here.

El Boalo: Madrid, El Boalo, 940m, UTM 30TVL2207, leg. F. Fontal, coll. MNCN.

The malaise trap was placed in an open, degraded *Quercus pyrenaica* forest. The trap was run from 9th March until 12th July 1998 and emptied regularly after seven days.

El Pardo: Madrid, Monte de El Pardo, El Goloso, 750m, UTM 30TVK4089, leg. J.L. Nieves & C. Rey, coll. MNCN.

The study site at El Pardo is dominated by a mature *Quercus ilex* forest with isolated *Qu. suber*, *Qu. coccifera* and *Fraxinus* spec. The climate is of continental Mediterranean character. The malaise trap samples studied reach from 8th April 1991 until 1st February 1992. The trap was emptied every six to eight days.

El Ventorrillo: Madrid, Sierra de Guedarrama, Cercedilla, Estación Biogeológica El Ventorrillo, 1450m, UTM 30TVL1412, leg. J.L. Nieves & C. Rey, coll. MNCN.

The malaise trap was placed on a south-west facing slope between a mixed deciduous forest dominated by *Acer pseudoplatanus* and *Ulmus glabra* and a mature growing of *Pinus sylvestris*. The transition zone between the two being characterised by small clearings, dominated by a variety of bushes like *Cytisus*, *Crataegus*, *Rubus*, *Rosa*, *Cistus*, *Santolina*, *Juniperus*, *Prunus* etc. The climate is subhumid mediterranean with cold winters. The samples studied comprise a time span from 9th June 1989 to 6th June 1990 (not between 10th November 1989 until 13th March 1990). The trap was emptied every six to eight days.

Fuenterrabia: Guipúzcoa, Fuenterrabia, 10m ,UTM 30TWP985023, leg. Leticia Martínez de Murguía, coll. C. Kehlmaier.

The fly was caught inside a house at the window.

Roblehondo: Jaén, Sierra de Cazorla, Roblehondo, 1300m, WG1301, leg. J.L. Nieves, coll. MNCN.

The malaise trap samples studied from this site reach from 4th April until 21st November 1993 with various gaps in between and two samples from July and September 1992.

Tanda: Asturias, Tanda, 600m, 30TUN2185, leg. C. Rey, coll. MNCN.

The only malaise trap sample studied reaches from 2nd to 9th August 1993.

Material and Methods

The following acronyms are used:

MNCN – Museo Nacional de Ciencias Naturales Madrid, Spain.

NHMW – Naturhistorisches Museum Wien, Austria.

ZMUC – Zoological Museum University of Copenhagen, Denmark.

Material was extracted by the author from 101 samples obtained through malaise traps and deposited at the MNCN.

Information on nomenclature and distribution records are given at the beginning of each family chapter. New species for the Spanish fauna are marked with an asterisk (*). If not otherwise stated, specimens were identified by the author and are deposited as alcohol material in the collections of the MNCN.

The morphological nomenclature and indices used in the descriptive part of *Lasiopa rufitarsis* Strobl, 1906 correspond to the latest revision of the European fauna by ROZKOŠNÝ (1982, 1983).

Results

Faunistics

Anisopodidae

Window gnats are a small family of Nematocera, represented in Europe by six species only, their saprophagous larvae normally developing in decaying or fermenting herbal matter (HAENNI 1997). HAENNI & BÄEZ (2002) list two species for mainland Spain, plus

two additional ones, known from old, unreliable records only. Here, five recent records for the widely distributed and holarctic *Sylvicola punctatus* (Fabricius, 1787) can be presented.

Sylvicola punctatus (Fabricius, 1787)

1♂, El Boalo, 16.–22.III.1998; 2♂♂, El Ventorrillo, 14.–21.VII.1989; 1♂, El Ventorrillo, 20.–28.VII.1989; 1♂, El Ventorrillo, 28.VII. – 4.VIII.1989.

Acroceridae

36 species of small-headed flies are considered to be present in Europe (following DE JONG et al. 2000 and DE JONG 2001), their larvae being endoparasites of spiders. Nomenclature and distribution records follows NARTSHUK (1988). The 84 specimens studied divide into 5 species, with *Ogcodes schembrii* Chvála, 1980 as new to the Spanish fauna, formerly only known from Malta. The checklist for mainland Spain provided by CARLES-TOLRÁ & BÁEZ (2002a) has to be supplemented by *O. schembrii* but at the same time obliterated for *A. borealis* Zetterstedt, 1838 (see under *Acrocera orbicula* (Fabricius, 1787)), counting 18 species for mainland Spain.

Subfamily Panopinae

Astomella hispaniae Lamarck, 1816

1♀, El Pardo, 24.–30.VII.1991.

A large, distinctive acrocerid fly with a Mediterranean distribution.

Subfamily Acrocerinae

Cyrtus gibbus (Fabricius, 1794)

1♀, Roblehondo, 1.–10.VIII.1993.

The species seems to be limited to the western Mediterranean area. For additional notes see below under *C. pusillus*.

Cyrtus pusillus Macquart, 1834

3♂♂, El Pardo, 9.–16.VII.1991; 1♂ 1♀, El Pardo, 24.–30.VII.1991, coll. C. Kehlmaier; 1♂ 1♀, El Pardo, 1.–8.VIII.1991; 2♂♂, El Ventorrillo, 18.–25.VIII.1989.

The species seems to be limited to the western Mediterranean area. Apart from the two species of *Cyrtus* mentioned here, NARTSHUK (1988) and CARLES-TOLRÁ & BÁEZ (2002a) list with *C. dentatus* Macquart, 1838 an additional species for Spain, originally described from Algeria. Whereas BRUNETTI (1926), who studied the type of *C. dentatus* deposited in Paris, synonymizes all three species, SÉGUY (1926) lists *C. dentatus* as a synonym of *C. pusillus*, without commenting on it. Contrary, GIL COLLADO (1929) treats it as a variation of *C. gibbus*, giving the thoracic and abdominal colouration characters of it, whereas PLESKE (1930) and SACK (1936) consider all as distinct species.

From the material studied at MNCN and NHMW, the latter identified by E.I. SCHLINGER, the author is sharing the view of GIL COLLADO (1929), who also introduced the length of the hairs on eyes and thorax as a suitable character for species separation in his key. Nevertheless, a revision of the Palaearctic representatives of this genus is needed, including the investigation of the genitalic structures, in order to clarify this taxonomic problem.

Acrocera (Acrocera) orbicula (Fabricius, 1787)

2♀♀, El Pardo, 17.–23.VI.1991; 4♀♀, El Pardo, 1.–8.VII.1991; 5♀♀, El Pardo, 9.–16.VII.1991; 3♀♀, El Pardo, 11.–18.VII.1991; 3♀♀, El Pardo, 24.–30.VII.1991; 2♀♀, El Pardo, 24.–31.VII.1991; 7♀♀, El Pardo, 1.–8.VIII.1991; 5♀♀, Roblehondo, 1.–10.VIII.1993; 7♀♀, Roblehondo, 10.–18.VIII.1993; 9♀♀, El Pardo, 16.–23.VIII.1991; 9♀♀, El Pardo, 24.–31.VIII.1991; 5♀♀, El Pardo, 1.–8.IX.1991; 1♀, Roblehondo, 5.–12.IX.1992; 5♀♀, El Pardo, 9.–16.IX.1991.

Widely distributed in the holarctic region plus a doubtful record from Ethiopia. According to DE JONG et al. (2000), who synonymized *A. orbicula* with *A. borealis* Zetterstedt, 1838, the former is characterized by an extreme variability of wing venation and body colouration and it is very likely that more European species placed in this subgenus will prove to be conspecific in the future, e.g. *A. minuscula* (Séguy, 1934) and *A. manevali* (Séguy, 1926) both cited for Spain. The mentioned synonymy of *A. orbicula* and *A. borealis* was not followed by CARLES-TOLRÁ & BÁEZ (2002a), who list *A. borealis* as a valid species. However, *A. borealis* should be deleted from the Spanish checklist.

**Ogcodes schembrii* Chvála, 1980

6♂♂, El Pardo, 24.–30.VII.1991, vid. Chvála, 2♂♂ coll. Kehlmaier.

The species richest genus of this family in the Palaearctic region is in the need of a thorough revision. Using the key given in CHVÁLA (1980), the specimens key out as *O. schembrii* Chvála, 1980, described and only recorded from Malta in the past.

Conopidae

The 55 thick-headed flies were identified to species level by Dr. JENS-HERMANN STUKE and correspond to 14 taxa. Nomenclature is according to CARLES-TOLRÁ & BÁEZ (2002c). The species list for Spain presented by CARLES-TOLRÁ & BÁEZ (2002c) has to be supplemented by *Myopotta rubripes* (Villeneuve, 1909), therefore adding up to 52 taxa, with mainland Spain showing 49 species.

Subfamily Conopinae

Conops flavipes Linnaeus, 1758

1♂ 1♀, El Ventorrillo, 18.–25.VIII.1989; 1♀, El Ventorrillo, 25.–31.VIII.1989.

Leopoldius diadematus Rondani, 1845

2♂♂ 3♀♀, El Pardo, 17.–23.IX.1991, 1♂ 1♀ in coll. Stuke; 2♂♂, El Pardo, 1.–8.X.1991.

Physocephala lacera (Meigen, 1824)

1♀, El Boalo, 22.–28.VI.1998.

Physocephala rufipes (Fabricius, 1781)

1♂, Roblehondo, 1.–10.VIII.1993.

Subfamily Myopinae

Melanosoma mundum Czerny & Strobl, 1909

2♂♂ 1♀, El Pardo, 1.–8.VI.1991, 1♂ in coll. Stuke; 1♀, El Boalo, 8.–14.VI.1998.

Myopa buccata Linnaeus, 1758

1♂, El Ventorrillo, 1.–7.V.1990; 1♂ 1♀, El Ventorrillo, 7.–15.V.1990; 1♂, El Ventorrillo, 23.–31.V.1990; 1♂, El Ventorrillo, 1.–6.VI.1990; 1♂, Roblehondo, 20.–28.VI.1993.

Myopa extricata Collin, 1960

1♀, El Ventorrillo, 1.–7.V.1990; 1♀, El Boalo, 25.–31.V.1998.

Myopa palliceps (Bigot, 1887)

1♂, El Boalo, 20.–26.IV.1998; 1♀, El Boalo, 4.–10.V.1998.

CARLES-TOLRÁ & BÁEZ (2002c) list this species as *Myopa minor* STROBL, 1906. The synonymy of these two taxa was revealed by STUKE (2003), who studied both STROBL's and BIGOT's type specimens.

**Myopotta rubripes* (Villeneuve, 1909)

1♀, El Boalo, 18.–24.V.1998; 2♂♂, El Ventorrillo, 23.–31.V.1990, 1♂ in coll. Stuke; 3♀♀, El Ventorrillo, 1.–6.VI.1990, 1♀ in coll. Stuke.

After CHVÁLA & SMITH (1988), *M. rubripes* has a western and southern Palaearctic distribution, also occurring in France and Italy.

Thecophora atra (Fabricius, 1775)

1♀, El Boalo, 20.–26.IV.1998; 1♀, El Ventorrillo, 23.–31.V.1990; 1♀, El Pardo, 9.–16.VI.1991; 1♀, El Ventorrillo, 28.VII.–4.VIII.1989; 4♀♀, El Ventorrillo, 11.–18.VIII.1989, 3♀♀, El Ventorrillo, 18.–25.VIII.1989; 1♀, El Ventorrillo, 1.–7.IX.1989.

Thecophora fulvipes (Robineau-Desvoidy, 1830)

1♂, Tanda, 2.–8.VIII.1993.

Thecophora melanopa Rondani, 1857

1♀, El Ventorrillo, 18.–25.VIII.1989; 1♀, El Ventorrillo, 25.–31.VIII.1989; 1♂, El Ventorrillo, 1.–7.IX.1989.

Thecophora pusilla (Meigen, 1824)

1♀, El Ventorrillo, 7.–14.VII.1989; 1♀, Roblehondo, 17.–25.VII.1992; 2♀♀, El Pardo, 24.–30.VII.1991.

Zodion erythrurum Rondani, 1865

1♂ 2♀♀, Roblehondo, 28.V.–15.VI.1993.

Stratiomyidae

The species are arranged according to the classification used in WOODLEY (2001). If not otherwise stated, distribution records are taken from WOODLEY (2001), with special reference to the Iberian Peninsula after CARLES-TOLRÁ & BÁEZ (2002b).

CARLES-TOLRÁ & BÁEZ (2002b) list 71 species for Spain, including the Balears and Canary Islands. Furthermore, two additional species could be added for mainland Spain by MASON & ROZKOŠNÝ (2003) lately.

The 59 specimens studied correspond to 15 species, of which *Adoxomyia dahlii* (MEIGEN, 1830) has to be considered as new to the Spanish fauna. Furthermore, the so far unknown male of *Lasiopa rufitarsis* STROBL, 1906 could be discovered amongst the material studied. As a result, the species list for Spain now adds up to 74 taxa, with mainland Spain showing 68 species respectively.

Subfamily Beridinae

Beris rozkosnyi Kassebeer, 1996

1♂, El Ventorrillo, 22.–30.VI.1989.

Recently described, the species stands very close to *B. clavipes* (Linnaeus, 1767) and *B. vallata* (Forster, 1771) and has been recorded from Morocco and Spain in the past. The three species can be separated using the key provided by KASSEBEER (1996).

Beris vallata (Forster, 1771)

1♀, El Ventorrillo, 9.–16.VI.1989.

A widely distributed European species, already recorded from Spain and Andorra in the past.

Chorisops tibialis (Meigen, 1820)

1♂, Tanda, 2.–9.VIII.1993; 2♂♂ 2♀♀, Roblehondo, 5.–12.IX.1992, 1♂ 1♀ in coll. Kehlmaier.

A widely distributed European species, formerly recorded from Spain and Andorra.

Chorisops tunisiae (Becker, 1915)

1♂, El Pardo, 8.–14.IV.1991.

HAENNI (1990) provides the first European records for this species, citing it from two localities in southern Spain (Sierra Nevada and Sierra de Cazorla). *Ch. tunisiae* stands close to *Ch. caroli* Troiano, 1995 and has been recorded from Algeria, Morocco, Portugal, Spain and Tunisia in the past.

Subfamily Pachygasterinae

Eupachygaster tarsalis (Zetterstedt, 1842)

1♀, El Boalo, 29.VI. – 5.VII.1998.

Only recently recorded from Spain for the first time by MASON & ROZKOŠNÝ (2003), though formerly known from Andorra. The only Palaearctic species of this genus is widespread.

Pachygaster atra (Panzer, 1798)

1♀, El Pardo, 9.–16.VI.1991.

A widespread western Palaearctic species, formerly recorded from Andorra, Portugal and Spain.

Pachygaster leachii Curtis, 1824

2♀♀, Tanda, 2.–9.VIII.1993, 1♀ in coll. C. Kehlmaier.

A widespread western Palaearctic species, already recorded from Andorra, Portugal and Spain in the past.

Subfamily Clitellariinae

**Adoxomyia dahlii* (Meigen, 1830)

4♀♀, El Boalo, 6.–12.VII.1998, 1♀ in coll. C. Kehlmaier; 3♀♀, El Pardo, 24.–31.VII.1991; 1♀, El Pardo, 1.–8.VIII.1991.

A Palaearctic species formerly recorded from Austria, Croatia, France, Greece, Israel, Italy, Romania, Yugoslavia and now for the first time also from Spain.

Pycnomalla splendens (Fabricius, 1787)

1♂, El Boalo, 4.–10.V.1998; 1♀, El Boalo, 25.–31.V.1998.

SACK (1911) provides a key for the three species belonging to the genus, all occurring in the Mediterranean region. ROZKOŠNÝ (1983) gives a redescription of *P. splendens*, figures the male and female terminalia and also comments briefly on the taxonomic situation of the closely related *P. auriflua* (Erichson, 1841). *P. splendens* is the most widespread and only European species, known from Algeria, Armenia, Israel, Morocco, Portugal, Spain and Tunisia (WOODLEY 2001).

Subfamily Hermetiinae

Hermetia illucens (Linnaeus, 1758)

1♀, Guipúzcoa, Fuenterrabia, 5.VIII.1991, leg. Martínez de Murguía, coll. Kehlmaier.

The European distribution data of this almost cosmopolitan soldier fly has only recently been summarized by ÜSTÜNER et al. (2003). For Spain it has been recorded from various provinces in the past (Alicante, Barcelona, Castellón, Lleida, Murcia, Santa Cruz de Tenerife, Teruel, Valencia). Additional findings for Switzerland are presented by TÓTH (1994) and for south-western France by DAUPHIN (2003). The record presented here for the province of Guipúzcoa indicates a wide distribution of *H. illucens* for the Iberian Peninsula, at least in the coastal areas.

Subfamily Sarginae

Chloromyia formosa (Scopoli, 1763)

1♀, El Boalo, 11.–17.V.1998; 1♂ 3♀♀, El Boalo, 1.–7.VI.1998; 1♀, El Boalo, 8.–14.VI.1998; 1♀, El Boalo, 22.–28.VI.1998.

Known from many European and Northern African countries, including Portugal and Spain, and introduced to the USA (New York).

Sargus cuprarius (Linnaeus, 1758)

1♂, El Boalo, 8.–14.VI.1998; 1♀, El Boalo, 15.–21.VI.1998; 1♂ 5♀♀, El Boalo, 22.–28.VI.1998, 1♂ 1♀ in coll. Kehlmaier; 1♀, El Boalo, 29.VI.–5.VII.1998; 1♂, El Ventorrillo, 31.VI.–6.VII.1989; 9♀♀, El Boalo, 6.–12.VII.1998; 2♀♀, El Ventorrillo, 7.–14.VII.1989; 1♂ 1♀, El Ventorrillo, 18.–25.VIII.1989.

Widely distributed in the Nearctic and Palearctic region, formerly also recorded from Andorra and Spain.

Subfamily Stratiomyinae

Oxycera germanica (Szilády, 1932)

3♀♀, Tanda, 2.–9.VIII.1993, 1♀ in coll. Kehlmaier.

O. germanica has a western Palearctic distribution, occurring in Algeria, France, Germany, Italy (TROIANO 1993), Spain and Switzerland.

Subfamily Nematelinae

Lasiopa rufitarsis Strobl, 1906

1♂ 1♀, Roblehondo, 1.–10.VIII.1993, dry material.

For faunistic records, description of the male sex and a brief taxonomic discussion see below.

Nemotelus latiusculus Loew, 1871

1♀, Roblehondo, 23.–29.VI.1993.

A Mediterranean species, originally described from a locality in Andalucía and nowadays cited from Algeria, Israel, Italy, Morocco, Spain and Tunisia.

Taxonomic notes on *Lasiopa rufitarsis* Strobl, 1906

Material of *L. rufitarsis* Strobl, 1906 studied

Spain 1♀, Teruel, Albarracín, 1000–1500m, 29.VI.1984, leg. V. Michelsen, coll. ZMUC; 1♂ 1♀, Granada, 18km N Huéscar, 1200m, 10.VII.1988, leg. V. Michelsen, coll. ZMUC; 1♂ 1♀, Jaén, Sierra de Cazorla, Roblehondo, 1.–10.VIII.1993, leg. J.L. Nieves, coll. MNCN.

Material of *L. krkensis* Lindner, 1938 studied

Croatia 1♂, Rab, Mt. Vipera, 27.VII.1912, coll. NHMW; Greece 1♂ 3♀♀, Peloponisos, Taiyetos, NW Xirokambi, 1000–1700m, 28.VIII.1983, leg. et coll. ZMUC.

Description of male *L. rufitarsis* Strobl, 1906

Body length 9.0–9.2mm

Head in lateral view with face distinctly prominent also above antenna, about as wide as postocular band at its maximum width. Eye densely covered with dark hairs, as long as pedicel. Frontal band narrow, at its minimum width slightly smaller than front ocellus. Frontal index = 7.1–8.1. Face and frons black and shining, densely covered with long white hairs. Antenna dark. Antennal index = 1.8. 4th flagellomere slightly shorter than 3rd one in dorsolateral view. Apical part of 4th flagellomere as well as 5th and 6th one densely haired. Last flagellomere slightly longer than 4th and 5th one combined in dorsolateral view. Ocellar triangle slightly isosceles. Proboscis short and broad.

Thorax black, humeral and postalar calli at least slightly and narrowly brownish-pale. Thoracic pile white, erect apically undulating. Legs black, knees (apex of femora and basal fifth to quarter of tibia) and at least beginning of basitarsi orange-yellow. Wing length = 6.8–6.9mm. Wings weakly brownish infuscated along costal margin, stronger veins and stigma brown. Halter with base and basal half of stem brown, apical half of stem and knob white.

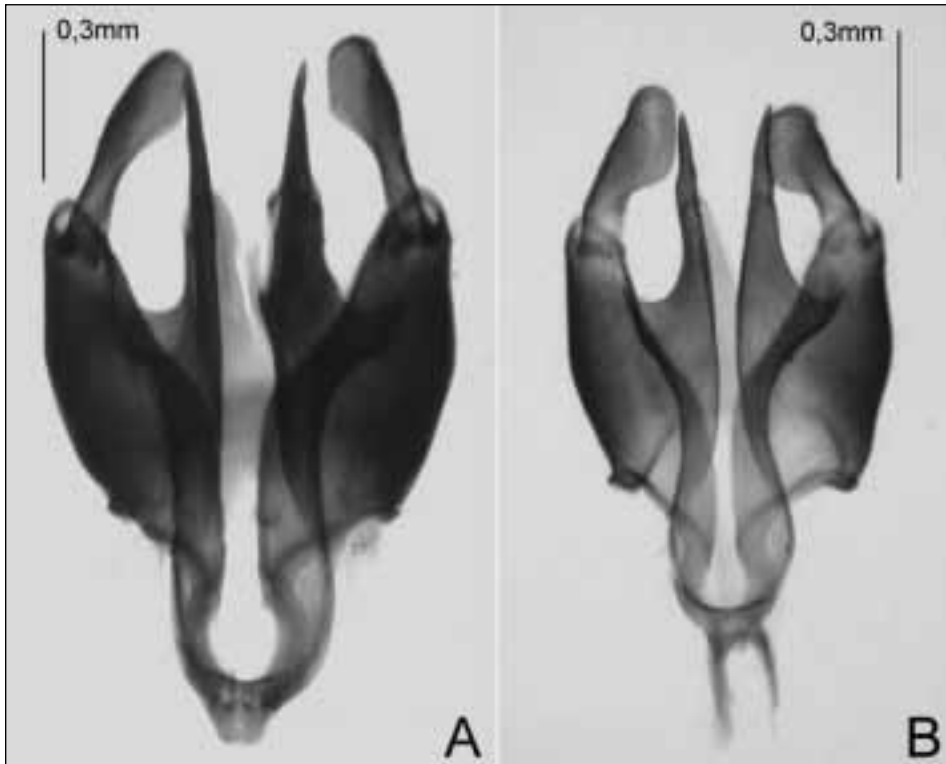


Fig. 1: Ventral part of male genitalia in dorsal view: A – *L. rufitarsis*; B – *L. krkensis*.

Abdomen predominantly black. Tergite 2 to 4 with small but distinct yellow posterolateral stripes along posterior margin. Tergite 5 with yellow posterior margin. Tergite 6 with paler posterolateral spots or pale posterior margin. Venter predominantly black. Posterior margin of sternite 5 broadly pale and translucent. Anterior margin of sternite 2 and posterior margin of sternite 3 and 4 narrowly translucent, somewhat paler and lacking hairs. Genitalia as in fig. 1A. Dististyli rather long and narrow. Branches of median process of synsternum rather long. Aedeagel complex distinctly broadened towards apex (fig.2A).

Characterization of female *L. rufitarsis* Strobl, 1906

Body length: 10.3-10.5mm. Eyes with short and inconspicuous dark hairs. Head in lateral view with face distinctly prominent (fig.3). Frons at its narrowest point 0.4 times maximum head width, slightly divergent posteriorly. Postocular band in upper half distinctly broader than length of scape. Yellowish frontal spots occupying 0.4 to 0.5 of frons width. Lower postocular spots oblong, occupying lower quarter to third of postocular band and shorter to slightly longer than pedicel and first flagellomere combined. Viewed dorsolaterally, antenna with 3rd flagellomere at least as long as wide and 4th flagellomere as long as or slightly shorter than 3rd flagellomere. Head and entire body predominantly covered with short and adpressed, silvery-white pile. However, hairs on frons, on centre of prescutum, scutum and scutellum and on tibia can be predominantly brownish pale. Wing length: 7.5-7.6mm. Colour of legs as in male but with yellow markings slightly more extended especially on tarsal segments, where

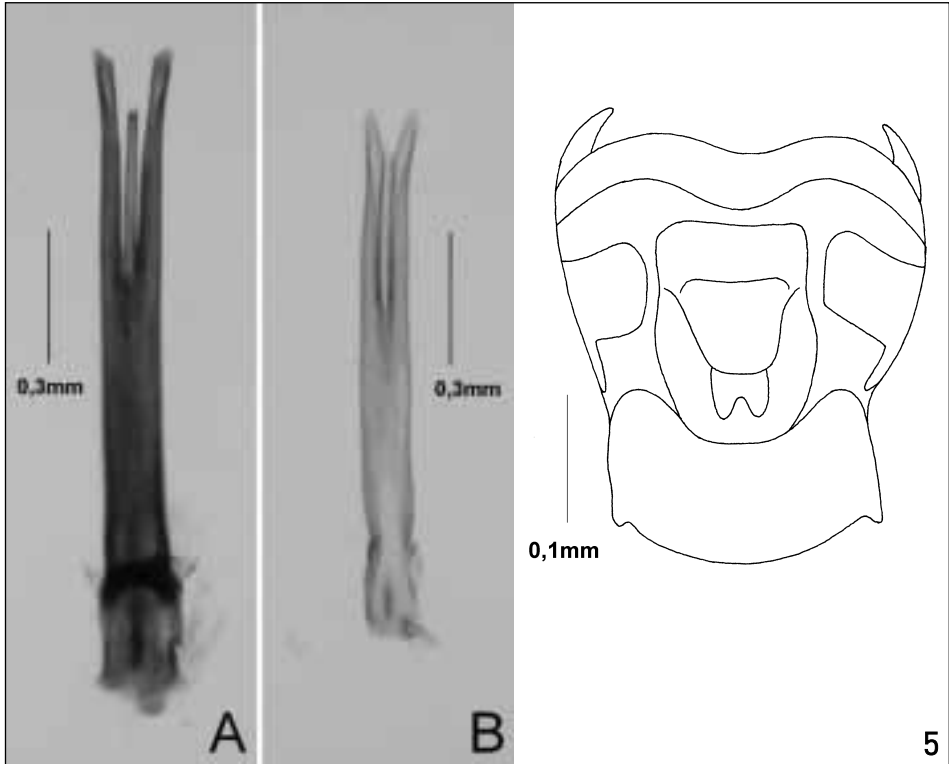


Fig. 2: Aedeagal complex in dorsal view: A – *L. rufitarsis*; B – *L. krkensis*.

Fig. 5: Genital furca of female *L. rufitarsis*.

the first two segments can be entirely yellow. Abdominal side markings slightly broader than in male. Tergite 5 and 6 with yellow posterior margin, taking up half of sternites length in its middle. Venter as in male but with posterior margin of sternite 5 and 6 broadly yellow. Genitalia furca as in fig. 5.

Discussion

The taxonomic situation of some of the 13 Palearctic species of the genus *Lasiopa* Brullé, 1833 is somewhat unclear at present. DUŠEK & ROZKOŠNÝ (1970) revised ten species, leaving out *L. pantherina* Séguy, 1930 and *L. rufitarsis*. In ROZKOŠNÝ (1983), the author then describes *L. pseudovillosa* Rozkošný, 1983 from Italy and gives a redescription of the female holotype of *L. rufitarsis* collected in the Province of Granada (Spain), not commenting on the genitalia. ROZKOŠNÝ (1983) briefly discusses its relation to the second European species with partly pale legs, *Lasiopa krkensis* Lindner, 1938, stating that it might be conspecific with the latter. However, the study of the male genitalia of *L. rufitarsis* showed distinct differences to *L. krkensis* as figured in ROZKOŠNÝ (1983: 281, plate 11: fig. 1-5). Additional outer morphological characters to differentiate male and female of both species are given in table 1. The character given by ROZKOŠNÝ (1983) to differentiate the females of these two species, the distinctly darker and shorter eye pile in *L. rufitarsis* could not be followed. In both species the

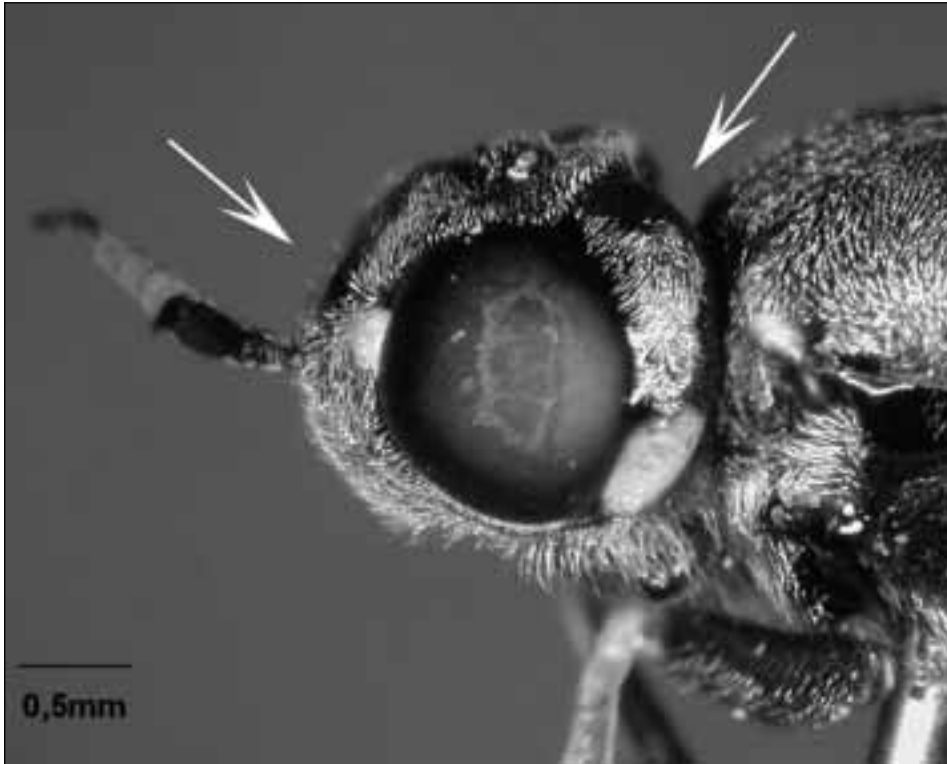


Fig. 3: Head of female *L. rufitarsis* in latero-lateral view. Arrows indicate identification characters mentioned in the text.

eye pile is dark and short (0.5mm in *L. rufitarsis* and 0.6mm in *L. krkensis*), with *L. rufitarsis* showing a little less dense distribution than *L. krkensis*.

In general, the structure of male and female genitalia strongly resemble that of *L. peleteria* Brullé, 1832 (figured in ROZKOŠNÝ (1983): 281, plate 11: fig. 11 & 282, plate 12: fig. 1-7), *L. manni* Mik, 1882 (figured in DUŠEK & ROZKOŠNÝ 1970: 25, Tafel III: fig. 1) and *L. benoisti* Séguy, 1930 (figured in DUŠEK & ROZKOŠNÝ 1970: 25, Tafel III: fig. 6). From the first species, *L. rufitarsis* can be reliably separated by various outer morphological characters, e.g. colouration of legs and female head, colour of head pile and width of frontal band in male. However, from *L. manni* (known from Italy, Tunisia and Turkey), *L. benoisti* (known from Morocco and Algeria) and *L. pantherina* (known from Morocco) a secure separation is problematic because these species were never investigated and keyed out together in the past. It might well be that some of them will prove to be synonymous in the future.

At present, *L. rufitarsis* is only known from mainland Spain (CARLES-TOLRÁ & BÁEZ 2002, WOODLEY 2001), but the presence in neighboring regions (e.g. in Portugal and Morocco) should be expected. It flies between end of June to middle of August and has been found in mountainous regions around 1200m above sea level.



Fig. 4: Head of female *L. krkensis* in lateral view.

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Table 1: Morphological characters to differentiate *L. rufitarsis* from *L. krkensis*.

♂	<i>L. rufitarsis</i>	<i>L. krkensis</i>
prominence of face in lateral view	as wide as max. width of postocular band	less than width of postocular band
thoracic and head pile	clear white	whitish to weakly brownish
apical half of pedicel and basal half of first flagellomere	dark	partly reddish-brown
knob of halter	white	weakly darkened
3rd flagellomere dorsolateral view	slightly longer than 4th	shorter than 4th
6th flagellomere dorsolateral view	slightly longer than 4th and 5th	as long as or shorter than 4th and 5th
genitalia	Dististyli longer and slender (fig. 1A). Aedeagal complex broadened apically (fig. 2A).	Dististyli shorter and broader (fig. 1B). Aedeagal complex not broadened apically (fig. 2B).
♀		
head in lateral view	fig. 3	fig. 4
postocular band in upper half	distinctly broader than length of scape	about as broad as scape
3rd flagellomere dorsolateral view	at least as long as wide	wider than long
4th flagellomere dorsolateral view	shorter or as long as 3rd flagellomere	longer than 3rd flagellomere
yellow posterior margin of sternite 5	comprising 50% of length of sternite 5	comprising 25-30% of length of sternite 5

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