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## The Vespiform Wasps of Portugal (Hymenoptera: Scoliidea, Tiphioidea, Pompiloidea & Vespoidea)

David Baldock (†), Leopoldo Castro, Ian Cross,  
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## **The Vespiform Wasps of Portugal (Hymenoptera: Scolioidae, Tiphioidea, Pompiloidea & Vespoidea)**

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### **The Vespiform Wasps of Portugal (Hymenoptera: Scolioidae, Tiphioidea, Pompiloidea & Vespoidea)**

**Abstract:** The present paper provides a provisional list of records, both from literature and from recent collections, of 279 species of Vespiform wasps from Portugal. There are remarkably few recent published records of Portuguese wasps. However, in the last 15 years there has been a considerable amount of collecting, mainly in the Algarve, which has added much to our knowledge of wasps and increased the species list by 16%. Despite this, further recording is needed, especially in the north. The list includes 38 species recorded from Portugal for the first time.

**Key words:** Hymenoptera, Sapygidae, Tiphidae, Bradynobaenidae, Scoliidae, Mutillidae, Pompilidae, Vespidae, biodiversity, faunistics, Portugal.

### **Las avispas vespiformes de Portugal (Hymenoptera: Scolioidae, Tiphioidea, Pompiloidea y Vespoidea)**

**Resumen:** Se presenta una lista provisional, basada tanto en fuentes bibliográficas como en muestreos recientes, de 279 especies de avispas vespiformes de Portugal. La fauna de avispas

de Portugal ha sido objeto de muy pocas publicaciones recientes. Sin embargo, en los últimos 15 años se ha venido desarrollando una importante labor de muestreo, sobre todo en el Algarve, que ha aumentado considerablemente el volumen de datos sobre estas avispa y ha incrementado la lista de especies en un 16%. Aun con todo, resulta necesario un mayor nivel de muestreos, especialmente en el norte. La lista incluye 38 especies que se registran de Portugal por primera vez.

**Palabras clave:** Hymenoptera, Sapygidae, Tiphidae, Bradynobaenidae, Scoliidae, Mutillidae, Pompilidae, Vespidae, biodiversidad, faunística, Portugal.

#### **As vespas vespiformes de Portugal (Hymenoptera: Scoliidea, Tiphioidea, Pompiloidea e Vespoidea)**

**Resumo:** Apresenta-se uma lista provisória, baseada em fontes bibliográficas e amostragens recentes, de 279 espécies de vespas vespiformes de Portugal. A fauna de vespas de Portugal tem sido objeto de poucas publicações recentes. Contudo, nos últimos 15 anos foram realizados importantes amostragens, sobretudo no Algarve, o que aumentou consideravelmente o volume de dados sobre essas vespas e incrementou o número de espécies conhecidas em 16%. Ainda assim, é necessário um maior esforço de amostragem, especialmente no norte. A lista inclui 38 espécies que são registadas em Portugal pela primeira vez.

**Palavras-chave:** Hymenoptera, Sapygidae, Tiphidae, Bradynobaenidae, Scoliidae, Mutillidae, Pompilidae, Vespidae, biodiversidade, faunística, Portugal.

In memory of David Baldock, who inspired us  
to study the Portuguese fauna







## **The Vespiform Wasps of Portugal (Hymenoptera: Scolioidae, Tiphioidea, Pompiloidea & Vespoidea)**

### **Introduction**

Even as early as 1988 it was recognised that the Vespiform wasps, which had long been regarded as forming a single superfamily, the Vespoidea, were in fact a paraphyletic assemblage (GAULD & BOLTON, 1988). One of the most recent suggested arrangements (BRANSTETTER *et al.*, 2017) would divide them into several superfamilies, with Vespoidea, Tiphioidea, Thynnoidea, Pompiloidea, Scolioidae and Formicoidea (ants) being found in Europe. These form an uneasy grouping, with the Scolioidae and Formicoidea standing apart from the others: the ants as a sister group to the Apoidea (bees and hunting wasps) and the Scolioidae as sister group to a clade containing the Formicoidea and Apoidea.

All of which makes it difficult to justify treating the “Vespiforms” as a single group. Furthermore, the Formicoidea have always been viewed as a “breed” apart, with their own specialist workers and literature. Following this tradition, and because the study of ants in Portugal is at an embryonic stage, we have omitted them from this list, though this leaves a disparate collection of superfamilies to deal with. Hopefully, a stable and widely-supported arrangement of the Aculeates will be reached before too many more years elapse. In the meantime, having treated the Chrysidoidea and Apoidea separately in other publications, we have maintained this artificial but traditional group for the sake of convenience.

Portugal is a small country, about one seventh the size of Spain and slightly smaller than England but, being on the extreme western edge of the Palaearctic, it has an interesting wasp fauna. Many species are restricted to the Iberian Peninsula and some are found elsewhere only in North Africa. Published records for the country are few, the main ones either being old, (e.g. SAUNDERS, 1881; DUSMET, 1921 and 1932 and the various publications by DINIZ between 1959 and 1989) or referring only to a limited area (e.g. KUHLMANN, 1996). This paper is a compilation of all records of vespiform wasps known to the authors, both from literature and from unpublished data supplied by various specialists, as well as the recent records of the authors and a number of other recorders. Given the incomplete state of the knowledge of Portuguese wasps it is by no means comprehensive. Therefore, it is hoped that the present list will encourage other recorders who have collected in Portugal to send either their records or specimens to the authors so that the list can be augmented.

## Material and Methods

Firstly, the literature available to the authors was searched. We have endeavoured to consult primary sources where available. Those references that added a species or a new locality to a species are given. All references to Portugal have been included. However, a species has only been accepted in the species count where a specific locality is given, or the paper is solely concerned with the Portuguese fauna. The localities are as given in the publication, though further information on the locality may be added in round brackets by the authors, where this provides interesting details or clarification; e.g. the province involved.

More general reviews of the wider Iberian, European or Western Palaearctic fauna sometimes list species as being found in “Portugal”, without giving further details or a literature reference. Such species are included but only in square brackets and are regarded as unconfirmed. They do not feature in the overall species totals.

Published distribution maps proved a particular source of dispute, as details of the underlying data points are rarely provided. We have included as Portuguese, species where individual records have been marked with points that clearly, and unambiguously, lie within the boundaries of the country. Species whose maps merely feature entire countries blocked in, though without specific data points, are regarded as unconfirmed and are listed in square brackets.

Secondly, numerous specialists have been asked to add to the list any species of which they had unpublished records. Many specimens of previously unpublished species that are mentioned in the text have been identified by specialist hymenopterists: these specialists are mentioned in Acknowledgements below.

Photographic evidence of a species has been accepted where its identity is unequivocal and it forms one of the following: the only record of a species, the first record, or records that represent significant extensions of range (e.g. a new province). These are often from Biodiversidad Virtual (BV) = <http://www.biodiversidadvirtual.org> - a useful online library of images. “Phot.” stands for the Modern Latin “photographavit” = photographed. These images have been determined by L. Castro unless otherwise stated.

### Published records

Some of the more significant publications include:

- SAUNDERS, 1881. A list of bees and wasps collected by A.E. Eaton during a visit to Portugal from April to June 1880, containing 8 Vespidae and *Nemka viduata*.
- DUSMET, 1921. A list of bees and wasps collected by him and his associates on a visit by car from Elvas to Porto, from 19-30 June 1921, containing 11 Vespidae, *Scolia hirta*, 3 Mutillids and 1 Pompilidae.
- DUSMET, 1931. A list of all bees and wasps known to him from Portugal, containing 3 Vespinae, 14 Eumeninae, 2 Masarinae and 13 Scoliiforms.
- DUSMET, 1932. A further list of bees and wasps collected on his visit to Portugal in 1921 which includes 11 Scoliiforms and 11 Pompilidae.
- DINIZ, 1960A. Checklist of the Portuguese Hymenoptera, with 27 Scoliiforms, 13 Pompilidae and 66 Vespidae (including the species recorded by Saunders and Dusmet).
- DINIZ, 1978. A list of the vespid wasps housed at the Museu e Laboratório Zoológico of Coimbra University, with 75 species.
- DINIZ, 1989. An important contribution, being a list of the known Portuguese Scoliiforms. It comprised 9 Tiphidae, 1 “Apterogynidae” (Bradynobaenidae), 2 Sapygidae, 16 Mutillidae, 1 Myrmosidae and 10 Scoliidae. Apart from the Mutillidae, which has received extensive recent revision, this was close to the modern list.
- KUHLMANN, 1996. A list of bees and wasps collected in Serra da Estrela in June 1989 and July/August 1990. This list includes 3 Tiphidae, 1 Scoliidae, 3 Mutillidae, 4 Vespidae, 7 Eumeninae and 15 Pompilidae.

### Unpublished records

As well as the specialists mentioned below, who sent records from their own collections and those they had access to, two significant collections had not been researched. One of these was the

Mendoça Collection in the Museu Nacional de História Natural e da Ciência, Lisboa (MNHNC). This comprises about 250 wasp specimens, collected by nine different members of the Mendoça family from numerous sites all over Portugal between 1950 and 2000. The senior author was able to borrow and determine these specimens with the assistance of various experts. The MNHNC also houses the Artur Serrano collection, with around 50 wasp specimens. L. Castro spent 2 days examining the collections in 2010. The remaining unpublished records correspond to material collected by the authors and many other contributors (see Table in “Recorders” section).

### **Arrangement**

Since the higher classification of the aculeates is in a state of flux we have followed a very conservative taxonomic framework for the families, and have not adopted the Superfamilies suggested in BRANSTETTER *et al.* (2017). However, the Bradynobaenidae has been placed alongside the Scoliidae, a position strongly supported in that paper. Families are listed in upper case, in a larger font, subfamilies in upper case, in a smaller font. Subfamilies are listed alphabetically within family, genera alphabetically within each subfamily and species within each genus. Subspecies names are only included where the subspecies is relevant to Portugal or Iberia.

Square brackets [ ] are used for:

a) Species where there is reason to believe that they may occur in Portugal (e.g. species with a wide distribution in the Iberian Peninsula) but where no Portuguese material is available and there is no specific reference to Portugal in the literature.

b) Recently established synonyms which have meant that a hitherto widely recognised name is no longer valid.

c) Specimens where the identity is provisional.

Such species do not figure in the species counts.

For each species the following information is given:

### **Species name**

An asterisk \* indicates a probable first published record for Portugal. There are first records for Portugal for 38 species in the list.

### **Wider geographic distribution**

Below the name of certain species we have added a very brief note of its geographic distribution so that readers may be aware of the wider context of the Portuguese species. Many species have a very restricted range, being endemic to Portugal or known only from Iberia. Some have a wider range encompassing south-west France and the Maghreb. Species listed as West-Mediterranean are known only from Iberia, France, Italy, Morocco, Algeria and Tunisia, including the Balearic Islands and the islands of Corsica, Sardinia and Sicily. For introduced species both the native locality and introduced range is given.

### **Portuguese distribution**

In addition to a wider geographic distribution, a Portuguese distribution is also given. Portugal is divided into three sections, northern, central and southern based roughly on the course of the two major rivers of Portugal: the Douro and the Tejo. In common with previous Portuguese faunal publications, e.g. CORLEY (2015), BALDOCK *et al.* (2018), we use the 1936 administrative divisions based on the historic provincial boundaries (Map 1). Consequently, Northern Portugal comprises

Minho, Trás-os-Montes e Alto Douro and Douro Litoral; Central Portugal comprises Beira Litoral, Beira Alta, Beira Baixa, Estremadura and Ribatejo; and Southern Portugal comprises Alto Alentejo, Baixo Alentejo and Algarve.

For frequent or common species a list of the historic provinces from which the species has been recorded is given at the end of the species account. This is in descending geographical basis, from north to south and west to east. To save space Trás-os-Montes e Alto Douro is simply given as Trás-os-Montes.



**Map 1.** The 1936 provinces of Continental Portugal.  
(Source: Wikipedia, adapted.)

### **Status**

Species are grouped into four categories based on the number of unpublished records: **rare**, up to 5 records; **scarce**, up to 15 records; **frequent**, up to 30 records and **common**, over 30 records. Species for which we have no unpublished records are automatically given the status of rare to reflect the fact that recent field work has yielded no new examples.

### **Number of records**

Following the status the number of unpublished records is given.

### **Prey Records**

Where available a general summary of recorded prey is given under each genus heading. This is based on the literature and usually comprises just the prey class or order, often followed by the relevant families. Unfortunately, there are virtually no published prey records from Portugal. For individual species, only information on prey that refers directly to Portugal (or in some cases the adjoining Spanish provinces) is given after the number of records. Prey records are all original observations by the authors.

### **Published Records**

Significant literature sources are listed in chronological order, starting with the first record of the species.

### **List of Records**

For each species we have listed the known localities in Portugal, with dates, number and sex of the specimens, the name of the collector and, in many cases, the name of the determiner. Where the collector and/or the determiner is one of the authors or the experts listed in the acknowledgements,

their initials are omitted. Specimens are assumed to be kept in the personal collection of the collector concerned unless otherwise stated.

All records are listed for rare and scarce species. These are listed by province in the same descending geographical order. For frequent and common species only the provinces are listed. Because much of the published work refers simply to a locality without specific dates or information on collectors and determiners, all mentions of ‘records’ in this paper refer specifically to unpublished material that either we or experts have seen ourselves.

## Recorders

We are grateful to the many recorders who contributed the unpublished records. Their names and the number of records each made are listed in Table I:

**Table I. Recorders and records.**

Collector	Records	Collector	Records
Aguado, L.O.	8	Keen, D.	21
Albernaz-Valente, A.	53	L'Homme, P.	5
Allen, G.W.	5	Livory, A. & Coulomb, R.	307
Andrade, R.	31	Martin, F.J.	1
Anon	64	Mauss, V.	4
Azevedo, M.	1	Mendoça family	50
Baldock, D.W.	215	Odelouca, R.	3
Boer, R. de	2	Owens, N.	2
Carvajal, M.	1	Passos de Carvalho, J.	1
Carvalho, P.	1	Pena, A.	1
Castro, L.	200	Penado, A.	53
Cross, I.C.	814	Pennycamp, F.	2
D' Haeseleer, J.	2	Plant, C.W.	1
Ferreira, S.	8	Rodrigues, P.	4
Franco, J.	7	Romano, M.	1
Gardiner, A.	2	Romão, F.	3
Gomes, P.	6	Schmid-Egger, C.	11
Gonçalves, A.	2	Sechi, D.	1
Gusenleitner, F.	6	Serrano, A.	7
Halada, J.	1	Silva, P.	1
Herrera, C.	1	Smit, J.	73
Howe, M. & E.	273	Tussac, H.	18
Ismay, J.W.	1	Van Eck, A.	1
Jacinto, V.	53	Whiteley, H.	18
Jenner, M.	14	Wood, T.	187
Jones, N.P.	3	<b>Total</b>	<b>2550</b>

### Abbreviations used

BV = Biodiversidad Virtual

MFNB = Museum für Naturkunde, Berlin, Germany

MNHNC = Museu Nacional de História Natural e da Ciência, Lisboa, Portugal

NCBNL = Naturalis Biodiversity Center, Leiden, The Netherlands

NHMUK = Natural History Museum United Kingdom

ZMA = Zoölogisch Museum Amsterdam, The Netherlands

## Systematic Account

The number of species recorded in Portugal, both from literature and from recent collections, is shown in Table II:

**Table II. Species recorded in Portugal**

"Scoliiforms" (Sapygidae, Tiphiidae, Bradynobaenidae, Scoliidae, Mutillidae)	66
Pompilidae	111
Vespidae	102
<b>Total</b>	<b>279</b>

### SAPYGIDAE

The taxonomy and nomenclature follow KURZENKO & GUSENLEITNER (1994) and BITSCH (2003).

2 species from 2 genera.

#### Genus *Monosapyga* Pic, 1920

1 species.

##### *Monosapyga clavicornis* (Linnaeus, 1758)

Central & Southern Portugal, rare, 1 record.

DINIZ 1989: (as *Sapyga clavicornis*): Coimbra, Resende 2♀, 5♂.

Algarve: Azinhal (Castro Marim), 2.iv.2010, 1♂, phot. V. Jacinto (BV).

#### Genus *Sapyga* Latreille, 1796

1 species.

##### *Sapyga quinquepunctata* (Fabricius, 1781)

Central & Southern Portugal, scarce, 12 records. (Fig. 1).

DUSMET 1931: Coimbra, 1♀.

DINIZ 1959: Belas.

DINIZ 1989: Aljustrel, Carcavelos, Cardigos, Coimbra 7♀, 9♂.

Estremadura, Lisboa, Porto Alto, 30.v.1971, 1♀ *det.* Baldock. MNHNC, coll. Mendoga.

Algarve, Aljezur, Vale da Telha, W of, 1.v.2016, 1♂, *det. & leg.* Wood.

Algarve, Amoreira, 1.iv. 2015, 1♂; 3.iv.2015, 1♂; 15.vi.2018, 1♀: all *det. & leg.* Cross.

Algarve, Bordeira, 22.iv.2017, 1♀, *det.* Cross.

Algarve, Burgau, 7.iv.2017. 1♂, *det. & leg.* Cross.

Algarve, Guia, 20.iv.2005, 1♀, *det. & leg.* Baldock.

Algarve, Mexilhoeira Grande, 30.iv.2005, 1♀, *det. & leg.* Smit.

Algarve, Monte Gordo, Praia do Cabeço, 26.iv.2016, 1♀, *det. & leg.* Wood.

Algarve, Pêra, Praia Grande, 17.iv.2017, 1♀, *det. & leg.* Cross.

Algarve, Salema, 22 Carriços, 19.iv.2017, 1♀, *det.* Cross.

### TIPHIIDAE

The taxonomy and nomenclature follow these sources:

- Methochinae: AGNOLI (2005);

- Myzininae: BONI BARTALUCCI (2012);

- Tiphiinae: ARBOUW (1985); BONI BARTALUCCI (2010).

13 species from 5 genera.

### METHOCHINAE

#### Genus *Methocha* Latreille, 1804

1 species.

##### *Methocha articulata* (Latreille, 1792)

Central Portugal, rare.

DINIZ 1989: (as *Methoca ichneumonoides (sic!)* Latr., 1804): Caparica, Coimbra, Condeixa (2♀, 4♂).

AGNOLI 2005: Portugal (material in the NHMUK).

## MYZININAE

### Genus *Meria* Illiger, 1807

5 species.

#### *Meria cylindrica* (Fabricius, 1793)

Widespread, rare, 2 records.

DINIZ 1989: (as *Myzine asueroi* Dusmet, 1930) Aljustrel, Carcavelos, 5♀.

BONI BARTALUCCI 1997: Douro, Resende, 16-19.vii.1953, 4♂.

BONI BARTALUCCI 2012: Algarve, 11-23.ix.1990, 2♂.

Algarve, Ribeira de Seixo, 26.vii.2015, 1♂, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Silves, 22.vii.2014, 1♂, *det.* Castro, *leg.* Baldock.

#### *Meria dorsalis* (Fabricius, 1804)

This taxon is disputed by BITSCH *et al.* (2014), who treat it as a synonym of *M. cylindrica*.

Northern & Central Portugal, rare, 1 record.

BONI BARTALUCCI 2012: Douro, Resende, 16-19.vii.1953, 9♂.

Estremadura, Nazaré, dunes sud, 19.viii.2015, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

#### *Meria lineata* (Sichel, 1859)

Widespread, scarce, 8 records.

BONI BARTALUCCI 2012: Serra da Estrela (as “Sierra de Estrela”), 18.v.1966, 1♂.

Trás-os-Montes, Bragança, Reconco, 3.vii.2016, 1♂, *det.* & *leg.* Wood.

Baixo Alentejo, Ribeira do Torgal, 26.vii.2016, 1♂, *det.* Baldock, *leg.* M. & E. Howe.

Alto Alentejo, Évora, São Miguel de Machede, 25.v.2017, 1♂, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, São Simão, 7.vii.2017, 1♂, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, Terrugem, 7.vii.2017, 1♂, *det.* & *leg.* Castro.

Algarve, Barragem da Bravura, 24.vii.2015, 1♂, *det.* Baldock, *leg.* Cross.

Algarve, Silves, 12.x.2010, 2♂; 22.vi.2014, 2♂, all *det.* Castro, *leg.* Baldock.

Algarve, Silves, Barragem do Arade, 27.vii.2015, 1♂, *det.* Castro *leg.* M. & E. Howe.

#### *Meria tripunctata* (Rossi, 1790)

Central & Southern Portugal, frequent, 25 records.

DUSMET 1931: (as *Myzine*) Évora, Mata de Leiria; 3♀, 8♂.

DINIZ 1959: (as *Myzine tripunctata*) Buarcos, Serra do Marão, Soure.

DINIZ 1989: (as *Myzine tripunctata*) Aljustrel, Cabo Mondego, Coimbra, Monte Gordo, Santa Rita (Algarve), Soure (21♂, 12♀).

KUHLMANN 1996: (as *Myzinum tripunctatum*): Vale do Zêzere (Serra da Estrela), viii.1987, 1♂; Vale de Candieira: 1400m (Serra da Estrela), 2.viii.1990, 1♂.

BONI BARTALUCCI 2012: Ribatejo, Almesina; Caparica; Algarve, Quarteira.

Beira Alta, Beira Baixa, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

#### *Meria volvulus* (Fabricius, 1798)

Southern Portugal, rare.

BONI BARTALUCCI 2012: Algarve, Quarteira, 22-28.viii.1976, 3♂, ZMA: 16-19.vi.1978, 1♂, NHMUK.

### Genus *Poecilotiphia* Cameron, 1902

2 species.

#### *Poecilotiphia lacteipennis* (Saunders, 1901)

Southern Portugal, scarce, 8 records.

BONI BARTALUCCI 2012: 155: Southern Portugal.

Baixo Alentejo, Zambujeira do Mar, 17.vii.2012, 2♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Algarve, Aljezur, 25.vii.2015, 2♂, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Carrapateira, 16.ix.2014, 1♂, *det.* & *leg.* A. Livory & R. Coulomb.

Algarve, Carrapateira, 21.vii.2015, 1♂, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Carrapateira, 17.ix.2015, 2♂, *det.* Baldock, *leg.* Wood.

Algarve, Lagos, Meia Praia, 24.ix.2014, 1♂; 27.ix.2014, 1♀, *det.* Baldock/Castro, *leg.* Cross.

Algarve, Odeceixe, 27.v.2011, 3♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

#### *Poecilotiphia rousselii* (Guérin, 1838)

Central & Southern Portugal, scarce, 14 records.

DUSMET 1931: (as *Myzine hispanica* Spin., 1843) Mata da Trafaria, 1♂.

- DINIZ 1989: (as *Myzine hispanica*) Cabo de Sines, Seixal, Trafaria (2♀, 15♂); (as *Myzine roussellii* Guérin 1838) Monte Gordo, Vila Real de Santo António (15♀).  
KUHLMANN 1996: (as “*Myzinum rousselli*”): Penhas da Saúde 1500m (Serra da Estrela), 20.vii.1990, 1♂.  
BONI BARTALUCCI 2012: Algarve, Quarteira, 22-23.viii.1976, 1♂; 16-19.vi.1978, 1♂.  
Alto Alentejo, Évora, São Miguel de Machede, 25.v.2017, 2♂, det. & leg. Castro.  
Baixo Alentejo, Melides, 7.viii.2018, 4♂, det. Baldock, leg. M. & E. Howe.  
Baixo Alentejo, Praia de Foz, 18.vii.2016, 7♂, det. Baldock, leg. M. & E. Howe.  
Baixo Alentejo, Santo André, 20.vii.2016, 1.vii.2018, 18♂, det. Baldock, leg. M. & E. Howe.  
Algarve, Aljezur, Praia do Monte Clérigo, 17.vii.2009, 1♂, det. Castro, leg. Baldock.  
Algarve, Carrapateira, 12.x.2010, 1♂, det. & leg. Baldock.  
Algarve, Carrapateira, 1.x.2014, 1♂, det. Baldock, leg. Cross.  
Algarve, Carrapateira, 28.vi.2015, 1♀, det. & leg. Cross.  
Algarve, Guia, 11.x.2009, 2♂, det. Castro, leg. Baldock.  
Algarve, Olhão, Ria Formosa, 28.vii.2015, 3♂, det. Baldock, leg. M. & E. Howe.  
Algarve, Pêra dunes, 18.ix.2015, 4♂, det. Baldock, leg. Wood.  
Algarve, Sesmarias, 23.v.1995, 1♀, det. Castro, leg. D. Keen (coll. Castro).  
Algarve, Silves, 27.vii.2015, 1♂, det. Baldock, leg. M. & E. Howe.

## TIPHIINAE

### Genus *Pseudotiphia* Ashmead, 1903

2 species.

#### *Pseudotiphia antigae* (Tournier, 1901)

Transferred to *Pseudotiphia* from *Tiphia* by BONI BARTALUCCI (2010).

Central & Southern Portugal, rare.

DINIZ 1989: (as *Tiphia antigae*): Caparica, Coimbra, Monte Gordo, Seixal, Trafaria (8♀, 7♂).

#### *Pseudotiphia villosa* (Fabricius, 1793)

Transferred to *Pseudotiphia* from *Tiphia* by BONI BARTALUCCI (2010); the species was for some time included in the genus *Ludita* NAGY, 1967, which is synonymised with *Pseudotiphia* in the 2010 paper.

Widespread, scarce, 14 records. (Fig. 2).

DUSMET 1931: (as *Tiphia morio*) Aldeia Nova de S. Bento, Almendres, “Conc.”, Évora, Mata de Leiria.

DINIZ 1959: (as *Tiphia morio*) Aldeia Nova de S. Bento, Almendres, Cova da Piedade, Évora, Mata de Leiria.

DINIZ 1989: (as *Tiphia morio* Fabr., 1787) Abrunhosa, Caparica, Carcavelos, Lagoa de Albufeira (6♀, 3♂).

Douro Litoral, Porto Alto, 15.ii.1972, 1♂, det. Baldock, MNHNC, coll. Mendocça.

Beira Baixa, Castelo Branco, Monsanto, 25.iv.2017, 1♂, det. & leg. Castro.

Ribatejo, Coruche, Couco, vii.2013, 1♀, det. Castro, leg. A. Albernaz Valente.

Alto Alentejo, Évora, Montemor-o-Novo, Foros de Vale de Figueira, 24.iv-15.v.2011, 1♂, 4♀, det. Castro, leg. A. Albernaz Valente.

Alto Alentejo, Montargil, 31.iii.1973, 1♂, det. Castro, leg. N.N. Mendocça, MNHNC, coll. Mendocça.

Alto Alentejo, Portalegre, Castelo de Vide, 26.v.2017, 3♀, 1♂, det. & leg. Castro.

Alto Alentejo, Portalegre, Porto da Espada, 26.v.2017, 1♂, det. & leg. Castro.

Baixo Alentejo, Castro Verde, 18.iv.2017, 1♂, 1♀, det. & leg. Baldock.

Algarve, Aljezur, Vale de Telha, W of, 1-9.v.2016, 2♀, det. Castro, leg. Wood.

Algarve, Benagil, 2.iv.2014, 1♀, det. & leg. Wood.

Algarve, Lagos, Ponta da Piedade, 21.iii.2015, 1♂, det. & leg. Cross.

Algarve, Lagos, Turiscampo, 8.iii.2018, 10.iii.2018, 2♂, det. Baldock/Castro, leg. N. Owens.

Algarve, Sagres, 12.iv.2006, 1♀, det. Castro, leg. M. & E. Howe.

### Genus *Tiphia* Fabricius, 1775

3 species.

#### *Tiphia femorata* Fabricius, 1775

Widespread, frequent, 30 records.

DUSMET 1931: Mata de Leiria, 3♂.

DINIZ 1959: Almendres, Berlenga.

DINIZ 1989: Cardigos, Coimbra, Manteigas, Soure, Trafaria (5♀, 8♂).

KUHLMANN 1996: Penhas da Saúde 1500m (Serra da Estrela), 18.vii.1990, 1♀; 31.vii.1990, 1♀.

Trás-os-Montes, Minho, Beira Alta, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.



***Tiphia hispanica* Dusmet, 1930**

Widespread, scarce, 9 records.

DUSMET 1931: Almedres, Évora, Herdade da Mitra; 9♂, 2♀.

DINIZ 1959: Alcanizes, Berlenga.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 18.v.2014, 1♂; 25.v.2015, 1♂, *det.* Castro, *leg.* A. Penado.

Trás-os-Montes, Bragança, Carrazedo, 19.vi.2015, 1♂, *det.* Baldock, *leg.* R. Andrade.

Alto Alentejo, Montemor-o-Novo, Foros de Vale de Figueira, 18.v.2016, 2♂, *det.* Castro, *leg.* A. Albernaz Valente.

Baixo, Alentejo, Castro Verde, 10 km S, 18.iv.2017, 1♂, *det.* Castro, *leg.* Baldock.

Algarve, Aljezur, Vale de Telha, W of, 1-9.v.2016, 1♂, 1♀, *det.* Castro, *leg.* Wood.

Algarve, Amoreira, 31.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Lagoa de Budens, 29.v.2016, 1♀, *det.* Castro, *leg.* Cross.

Algarve, Odeceixe, 27.v.2011, 1♂, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

***Tiphia minuta* Vander Linden, 1827**

Northern & Central Portugal, rare, 1 record.

DUSMET 1931: Herdade da Mitra, 1♂.

DINIZ 1989: Coimbra, Figueira da Foz, 2♀, 1♂.

Trás-os-Montes, Bragança, Carrazedo, 19.vi.2015, 1♂, *det.* Baldock, *leg.* R. Andrade.

[*Tiphia* sp. ]

The identity of this form is uncertain.

DUSMET 1931: (as *Tiphia femorata* var. *distincta* Tourn.) Mitra, Herdade da Mitra, 8♂.

DINIZ 1959: (as *Tiphia femorata* var. *distincta*) Mata de Leiria, Mitra.

## BRADYNOBAENIDAE

The taxonomy and nomenclature follow PAGLIANO (2002).

1 species from 1 genus.

**Genus *Gynecaptera* Skorikov, 1935**

1 species.

***Gynecaptera bimaculata* (André, 1898)**

Central & Southern Portugal, rare, 1 record. (Fig. 3).

DUSMET 1921: (as *Apterogyna*) Setúbal, 1921, 2♂.

DINIZ 1959: (as *Apterogyna*) Mitra.

DINIZ 1989: (as *Apterogyna*) Coimbra, Estoril 2♀, 2♂.

Baixo Alentejo, Mina de São Domingos, 24.v.2017, 1♀, *det.* & *leg.* Cross.

## SCOLIIDAE

The taxonomy and nomenclature follow OSTEN (2000, 2005).

10 species from 5 genera.

**Genus *Campsomeriella* Betrem, 1941**

1 species.

**\**Campsomeriella thoracica* (Fabricius, 1787)**

Southern Portugal, frequent, 22 records.

To date all records have come from the Algarve where it has an interesting phenology, having been recorded in every month except January, June and July. This probably represents a single, prolonged late summer emergence of both sexes, with males lingering on until December. Only the females overwinter and are still present in May.

Algarve, Praia de Monte Clérigo, 11.x.2009, 5♂, *det.* Castro, *leg.* Baldock.

Algarve.

**Genus *Colpa* Dufour, 1841**

2 species.

***Colpa galbula* (Pallas, 1771)**

(= *Colpa sexmaculata* (Fabricius, 1781), see LELEJ & MOKROUSOV (2017))

Widespread, frequent, 28 records.

DUSMET 1931: (as *Elis*) Lavos, Mata de Leiria, Mata da Trafaria; 2♂, 6♀.

DINIZ 1959: (as *Elis sexmaculata*) Buarcos, Foz do Rio Lis.

BETREM 1972: (as *Trielis interrupta* (Fabr., 1781)) Trafaria, 21.vii.1950, 1♂, leg. P.M.F. Verhoeff.

DINIZ 1989: (as *Trielis interrupta*) Coimbra, 1♀, 1♂.

Minho, Douro Litoral, Beira Litoral, Estremadura, Baixa Alentejo, Algarve.

***Colpa quinquecincta* (Fabricius, 1793)**

Widespread, common, 36 records.

DUSMET 1931: (as *Elis villosa* F.) Buarcos, Évora, Mitra; 2♀, 4♂.

DINIZ 1959: (as *Elis villosa* F.) Mata do Lagar do Seminário.

BETREM 1972: (as *Trielis quinquecincta occidentalis* Betrem & Bradley, 1972) Cascais, Boca do Inferno, 23.vii.1950, 1♀, leg. P.M.F. Verhoeff.

DINIZ 1989: (as *Trielis quinquecincta*) Aljustrel, Amarante, Cabo Mondego, Cascais, Coimbra, Évora, Figueira da Foz, Lagoa de Albufeira, Lisboa, Miranda do Corvo, Monchique, Oliveira de Azeméis, Pinhal Novo, Resende, Santo Tirso, Trafaria, Viseu (33♀, 62♂).

Trás-os-Montes, Beira Alta, Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

[*Colpa sexmaculata* (Fabricius, 1781) = *Colpa galbula*]

**Genus *Dasyscolia* Bradley, 1951**

1 species.

***Dasyscolia ciliata* (Fabricius, 1787)**

Central & Southern Portugal, common, 38 records. (Fig. 4).

DUSMET 1930: (as *Elis*) Beja, Bensafrim, Lagos.

DUSMET 1931: (as *Elis*) Évora, 1♂.

DINIZ 1959: (as *Elis ciliata*) Mitra.

DINIZ 1989: Armação de Pêra, Coimbra, Condeixa, Figueira da Foz, Setúbal, Vila do Bispo (8, 21♂)

Ribatejo, Estremadura, Beira Litoral, Baixo Alentejo, Algarve.

**Genus *Megascolia* Betrem, 1928**

2 species.

***Megascolia bidens* (Linnaeus, 1767)**

Central & Southern Portugal, scarce, 9 records.

DUSMET 1930: (as *Scolia*) Lisboa.

DINIZ 1989: Armação de Pêra, Coimbra, Condeixa, Lisboa, Seixal, Trofa (6♀, 13♂).

Estremadura, Lisboa, Passil, 7.v.1987, 1♂, det. Castro, leg. P. Mendoça, MNHNC, coll. Mendoça.

Baixo Alentejo, Sines, 3.vi.1970, 1♀, det. Castro, leg. P. Mendoça, MNHNC, coll. Mendoça.

Baixo Alentejo, Vila Nova de Milfontes, 3-14.vii.1971, 3♀, det. Castro, leg. N.N. Mendoça, MNHNC coll. Mendoça.

Algarve, Amoreira, 2.v.2005, 1♂, 1♀; det. & leg. Smit.

Algarve, Amoreira, 11.iv.2015, 1♀, det. & leg. Cross.

Algarve, Carrapateira, 2.v.2005, 1♂, 1♀; det. & leg. Smit.

Algarve, Guia, 2.v.2008, 1♂, 1♀, det. & leg. Baldock.

Algarve, Pêra, 5.v.2005, 1♂ det. & leg. Smit.

Algarve, Vale de Telha, 23.iv.2017, 2♀ det. & leg. Smit.

***Megascolia maculata* (Drury, 1773) ssp. *flavifrons* (Fabricius, 1775)**

Central & Southern Portugal, frequent, 29 records. (Fig. 5).

DUSMET 1931: (as *Scolia flavifrons*) Coimbra, Évora.

DINIZ 1959: (as *Scolia flavifrons*): Santarém.

DINIZ 1989: (as *M. flavifrons* (Fabricius) ssp. *haemorrhoidalis* (Fabricius, 1787)) Amarante, Castelo Branco, Coimbra, Condeixa, Elvas, Évora, Figueira da Foz, Gouveia, Monte Gordo, Oliveira do Bairro, Resende, Seixal, Serra do Gerez, Vila Real de Santo António, Viseu (24♀, 46♂).

Beira Alta, Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Scolia* Fabricius, 1775**

4 species.

***Scolia erythrocephala* Fabricius, 1798**

Central & Southern Portugal, scarce, 11 records.

DUSMET 1930: Pinhão.

DINIZ 1989: Aveiro, Caparica, Coimbra, Faro, Lisboa, Monte Gordo, Tabuaço, Vila Real de Santo António (9♀, 26♂).

Alto Alentejo, Évora, Mora, 8.viii.1983, 1♀, *det.* Castro, *leg.* N. Mendonça. MNHNC, coll. Mendonça.

Alto Alentejo, Montargil, 29.vii.1973, 2♀; 15.viii.1973, 1♀, *det.* Castro, *leg.* P. Mendonça, MNHNC, coll. Mendonça.

Alto Alentejo, Montes Juntos, 14.ix.1975, 1♂, *det.* Castro, *leg.* & coll. A. Serrano, MNHNC.

Baixo Alentejo, Alcácer do Sal, 30.vi.2016, 1♂, 1♀, *det.* Castro, phot. L. O. Aguado.

Algarve, Olhão, 1.viii.2015, 3♂, 3♀, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Silves, 24.vi.2014, 1♀, *det.* & *leg.* Baldock.

Algarve, Tavira, 1.vi.2011, 1♂, *det.* & *leg.* A. Livory & R. Coulomb.

Algarve, Tavira, Rio Séqua, 30.vii.2015, 3♂, 2.viii.2015, 2♂, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Vila Real de Santo António, 3.vii.2010, 2♂, *det.* Castro, *leg.* A. Livory.

***Scolia hirta* (Schrank, 1781)**

Widespread, common, 40 records. (Fig. 6).

DUSMET 1921: Porto, 1921, 1♀.

DUSMET 1931: Amarante, Coimbra, Mitra, Sapinha.

DINIZ 1959: Buarcos, Mata de Leiria, Ribeira de Valverde.

DINIZ 1989: Coimbra, Monchique, Serra do Gerês, Soure (5♀, 6♂).

Minho, Trás-os-Montes, Beira Alta, Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

***Scolia hortorum* Fabricius, 1787 ssp. *nouveli* Hamon, 1992**

Widespread, scarce, 10 records.

All the material examined (eight of ten recent records) has proven to be ssp. *nouveli*. The presence of ssp. *hortorum* cannot be excluded but it is likely that all Portuguese *Scolia hortorum* will prove to be ssp. *nouveli*.

DINIZ 1989: Serra do Gerês, 1♀, 1♂. (Also Diniz's "*Scolia insubrica*", Coimbra, Mata do Fundão, Montemor).

Beira Litoral, Fátima, 6.vii.1969, 1♂, *det.* Castro, *leg.* N. Mendonça. MNHNC, (coll. Mendonça).

Beira Baixa, Alameda (Castelo Branco), 4.vii.2009, 1♀, phot. P. Rodrigues (BV).

Beira Baixa, Caramulinho, 27.vii.2018, 1♂, *det.* Cross, *leg.* M. & E. Howe.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 1♀, 8.vii.2017, *det.* & *leg.* Castro.

Baixo Alentejo, Praia de Odeceixe, 21.vii.2016, 1♂, 1♀, *det.* Castro, *leg.* M. & E. Howe.

Baixo Alentejo, Santo André, 5.viii.2018, 6.viii.2018, 2♀, *det.* Baldock, *leg.* M. & E. Howe.

Baixo Alentejo, Vila Nova de Milfontes, 10.vii.1971, 1♀, *det.* Castro, *leg.* P. Mendonça. MNHNC, (coll. Mendonça).

Algarve, Odeceixe, 25.vii.2010, 1♂, *det.* & *leg.* A. Livory & R. Coulomb.

Algarve, Praia de Odeceixe, 26.vii.2015, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

***Scolia sexmaculata* (Müller, 1766)**

Widespread, scarce, 13 records.

DUSMET 1930: (as *Scolia quadripunctata* F.): Lagos, Porto.

DINIZ 1989: Aveiro, Azenhas do Mar, Cabo de Sines, Caparica, Cascais, Coimbra, Figueira da Foz, Lagoa de Albufeira, Marinha Grande, Mata de Leiria, Miranda do Corvo, Monte Gordo, Resende, S. Martinho do Porto, Serra da Estrela, Tróia, Vila Real de Santo António, Vouzela (35♀, 49♂).

KUHLMANN 1996: (as *Scolia quadripunctata* Fabricius): Serra da Estrela; Vale do Zêzere 1000-1200m, viii.1987, 1♂, 1♀; Penhas da Saúde 1500m, 29.vii.1990, 1♀; Manteigas 880m, 26.vii.1990, 1♂.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 26/29.vi.2015, 2♀, *det.* Baldock, *leg.* A. Penado.

Trás-os-Montes, Moimenta, hills E of, 2.vii.2016, 3♂, *det.* & *leg.* Wood.

Beira Alta: Paços da Serra; *det.* Castro, MNHNC (coll. Mendonça).

Estremadura: Caparica; *det.* Castro, MNHNC (coll. Mendonça).

Estremadura, Zambujeira do Mar, 17.vii.2012, 1♂, 2♀, *det.* Baldock, *leg.* A. Livory & R. Coulomb.

Alto Alentejo, Évora, São Miguel de Machede, 25.v.2017, 1♀, 1♂, *det.* & *leg.* Castro.

Baixo Alentejo, Sines, 12.vi.1978, 1♂, *det.* Castro., *leg.* & coll. Artur Serrano, MNHNC.

Baixo Alentejo, Santo André, 5.viii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Amoreira, 3.vi.2015, 1♂, *det.* & *leg.* Cross.

Algarve, Amoreira, 23.v.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Carrapateira, 18.vi.2015, 1♀; 1.vii.2018, 1♂; both *det.* & *leg.* Cross.

Algarve, Odeceixe, 4.vii.2008, 1♂; *det.* Baldock, *leg.* A. Livory & R. Coulomb.

Algarve, Raposeira, 29.v.2016, 1♂, *det.* & *leg.* Cross.

Algarve, Vilamoura, 30.v.1988, 1♂, *det.* Baldock, *leg.* N. Jones.

## MUTILLIDAE

The taxonomy and nomenclature follow LELEJ (2002).

40 species from 15 genera.

## MYRMOSINAE

### Genus *Krombeinella* Pate, 1947

2 species.

#### *Krombeinella aterrima* (Suárez, 1959)

Northern & Southern Portugal, rare, 3 records.

SUÁREZ 1988: Beira Alta, Resende, 18.viii.1943 + 17.vii.1958 + 1.ix.1946, 2♂, 1♀, *leg.* N.F. de Andrade; 16- 19.vii.1953, 3♂, *leg.* P.M.F. Verhoeff.

LELEJ 2002: Portugal.

Trás-os-Montes, Bragança, Mogadouro, Meirinhos, 17.vi.2015, 1♀, *det.* Baldock, *leg.* R. Andrade.

Douro Litoral, Loivos do Monte, 8.ix.2016, 1♂, *det.* Romano, *leg.* Cross.

Algarve, Silves, 10.vi.2011, 3♂; 22.vi.2014, 2♂, *det.* Baldock/Romano, *leg.* Baldock.

#### *Krombeinella beaumonti* (Invrea, 1953)

Central and Southern Portugal, rare, 1 record.

SUÁREZ 1988: Estremadura, Estoril, 18.vii.1956 + 8.viii.1956, 2♂; Lisboa, Monsanto, 7.vi.1948, 1♂; all *leg.* N.F. de Andrade. (f. *scutellata*).

LELEJ 2002: Portugal.

Algarve, Carrapateira, 15.ix.2016, 1♂, *det.* & *leg.* Cross.

### Genus *Myrmosa* Latreille, 1796

1 species.

#### *Myrmosa atra* Panzer, 1801

Northern & Central Portugal, rare.

DUSMET 1921: (as *Myrmosa melanocephala* (Fab., 1793).) Porto, vi.1921, 1♂.

DINIZ 1989: (as *Myrmosa melanocephala*) Amarante, Aveiro, Caminha; 2 ♀, 4♂.

SUÁREZ 1988: Beira Alta, Resende, 17.vii.1953, 1♂, *leg.* N.F. de Andrade; 16-18.vii.1953, 1♀, 2♂, *leg.* P.M.F. Verhoeff.

### Genus *Paramyrmosa* Saussure, 1880

1 species.

#### *Paramyrmosa brunnipes* (Lepelletier, 1845)

Widespread, rare, 4 records.

SUÁREZ 1988: Douro Litoral, Porto, vii.1921, 1♂, *leg.* J.M. Dusmet; Beira Alta, Resende, 16.vii.1953 + 12.vii.1954 1♀, 1♂, *leg.* N.F. de Andrade; 16-19.vii.1953, 2♂ *leg.* P.M.F. Verhoeff.

LELEJ 2002: Portugal.

Minho, Esposende, Rio Tinto, 3.vii.2014, 1♀, *det.* Baldock/Romano, *leg.* R. Andrade.

Algarve, Cacela Velha, 31.v.2018, 1♀, *det.* & *leg.* Cross.

Algarve, Lagoa de Budens, 29.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Luz de Tavira, 4.v.2005, 1♂, *det.* & *leg.* Smit.

## MYRMILLINAE

### Genus *Bidecoloratilla* Turrisi & Matteini Palmerini, 2015

2 species.

#### *Bidecoloratilla iberica* (Suárez, 1958) = *Blakeius chiesi ibericus*.

Widespread, scarce, 13 records.

DINIZ 1960B: (as *Mutilla chiesii iberica*) Portugal.

LELEJ 2002: Portugal.

Douro Litoral, Chapa, 9.ix.2016, 3♂, *det.* & *leg.* Cross.

Beira Baixa, Caramoulo, 24.vii.2018, 1♀, *det.* Romano, *leg.* M. & E. Howe.

Beira Baixa, Freimoninho, 23.vii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Estremadura, Cabo Espichel, 16.v.2012, 1♀, *det.* Romano, *leg.* A. Livory.

Ribatejo, Santarém, 28.ix.1975, 1♀, *det.* Baldock. MNHNC, coll. Mendonça.  
Algarve, Aljezur, Odeceixe, 9.vii.2009, 1♀; 25.vii.2010, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.  
Algarve, Amoreira, 3.iv.2015, 13.iv.2015, 2♀, *det.* Romano; 1.xi.2016, 1♂, *det.* Cross, all *leg.* Cross.  
Algarve, Cacela Velha, 11.iv.2017, 1♀, *det.* & *leg.* Cross.  
Algarve, Sagres, 1.iii.2005, 1♀, *det.* Romano, *leg.* M. & E. Howe.  
Algarve, Salema, Boca do Rio, 27.iv.2016, 1♂, 1♀, *det.* & *leg.* Cross.

***Bidecoloratilla negrei* (Suárez, 1958) = *Blakeius chiesi negrei*.**

Portugal, rare.

LELEJ 2002: (as *Blakeius chiesi negrei*) Portugal.

**Genus *Blakeius* Ashmead, 1903**

1 species.

***Blakeius ortizi* (Suárez, 1954)**

Central Portugal, rare.

SUÁREZ 1954: (as *Myrmilla ortizi*) Lisboa, 1 ♀ (paratype); Monsanto, Lisboa 1♀ (paratype).

**Genus *Myrmilla* Wesmael, 1852**

3 species.

***Myrmilla calva* (Villers, 1798)**

Widespread, frequent, 21 records.

LELEJ 2002: Portugal.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde 1500m, *det.* B. Petersen 29.vii.1990, 1♀. At nest site of *Philanthus triangulum*.

Douro Litoral, Beira Litoral, Beira Alta, Baixo Alentejo, Algarve.

***Myrmilla capitata* Lucas, 1849**

Central & Southern Portugal, scarce, 13 records.

DINIZ 1960B: (as *Mutilla capitata*) Portugal.

Beira Litoral, Fátima, 9.vi.1972, 1♀, *det.* Baldock/Romano, MNHNC, coll. Mendonça.

Estremadura, Cabo Espichel, 16.v.2012, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

Estremadura, Sines, 10.vi.1970, 1♀, *det.* Baldock/Romano, MNHNC, coll. Mendonça.

Ribatejo, Montargil, 13.iv.1974, 1♀, *det.* Baldock/Romano, MNHNC, coll. Mendonça.

Baixo Alentejo, Cascalheira, 5.viii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Baixo Alentejo, Cercal, 26.vii.2016, 1♀, *det.* Romano, *leg.* M. & E. Howe.

Algarve, Amoreira, 1.iv.2015, 1♀, *det.* Romano, *leg.* Cross.

Algarve, Cacela Velha, 11.iv.2017, 1♀, *det.* & *leg.* Cross.

Algarve; Guia, 17.v.1999, 4♀; 28.iv.2004, 6♀; 12.vi.2011, 1♀, *det.* Romano, *leg.* Baldock.

Algarve, Pêra, Praia Grande, 13.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Salema, Boca do Rio, 9.iv.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Tavira, 30.v.2016, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

***Myrmilla erythrocephala* (Latreille, 1792)**

Portugal, rare.

LELEJ 2002: Portugal.

**Genus *Sigilla* Skorikov, 1927**

1 species.

***Sigilla dorsata* (Fabricius, 1798)**

Widespread, frequent, 18 records.

PETERSEN 1988: Portugal.

Trás-os-Montes, Beira Litoral, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

## MUTILLINAE

**Genus *Mutilla* Linnaeus, 1758**

1 species.

***Mutilla europaea* Linnaeus, 1758**

Central Portugal, rare, 1 record.

DINIZ 1989: Aljustrel, Coimbra, Soure 1♀ 2♂.

Beira Alta, Manteigas, Vale do Zêzere, 14.vi.2016, 1♀, *det.* A. Livory/ Romano, *leg.* A. Livory & R. Coulomb.

**Genus *Ronisia* Costa, 1858**

3 species.

***Ronisia barbarula* Petersen, 1988**

Central & Southern Portugal, frequent, 28 records.

PETERSEN 1988: Aveiro, Buçaco, viii-ix.1930, 1♂, Chopard; Algarve, Lagos, 27.vi.1983, 1♀, Beira Alta, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

***Ronisia ghiliani* (Spinola, 1843)**

Widespread, frequent, 24 records.

DINIZ 1960b: (as *Mutilla barbara* var. *ghiliani*) Portugal.

PETERSEN 1988: Portugal.

LELEJ 2002: Portugal.

Trás-os-Montes, Douro Litoral, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

***Ronisia marocana* (Olivier, 1811)**

Southern Portugal, rare.

DINIZ 1960b: (as *Mutilla maroccana* var. *novenguttata*) Portugal.

PETERSEN 1988: Lagos.

LELEJ 2002: Portugal.

**Genus *Tropidotilla* Bischoff, 1920**

1 species.

***Tropidotilla litoralis* (Petagna, 1787)**

Central & Southern Portugal, scarce, 15 records. (Fig. 7).

LELEJ 2002: Portugal.

Estremadura, Sesimbra, 3.vi.2011, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

Ribatejo, Santarém, 31.x.1976, 1♀, *det.* Romano/Baldock. MNHNC, coll. Mendouça.

Alto Alentejo, Montargil, 9.ix.1980, 1♀, *det.* Romano/Baldock. MNHNC, coll. Mendouça.

Algarve, Bordeira, 20.ix.2010, 1♀, *det.* Romano, *leg.* H. Whiteley.

Algarve, Burgau, 13.v.2017, 1♀, *det.* Cross.

Algarve, Burgau, Barrancão, 25.iv.2017, 1♀, phot.; 18.v.2018; both *det.* Cross.

Algarve, Cabo Espichel, 16.v.2012, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

Algarve, Carrapateira, 25.v.2017, 1♀, *det.* Cross.

Algarve, Guia, 2.v.2008, 1♀, *det.* & *leg.* Baldock.

Algarve, Lagoa de Budens, 29.iv.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Mexilhoeira Grande, 30.iv.2005, 1♀, *det.* & *leg.* Smit.

Algarve, Pêra, Praia Grande, 12.vi.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Salema, 10.v.2017, 1♀, *det.* Cross.

Algarve, Salema, Boca do Rio, 27.iv.2016, 1♀, *det.* & *leg.* Cross.

**Genus *Nemka* Lelej, 1985**

1 species.

***Nemka viduata* (Pallas, 1773) ssp. *andalusiana* (Skorikov, 1935)**

Central & Southern Portugal, frequent, 16 records.

SAUNDERS 1881: (as *Mutilla stridula* Rossi) Almodôvar, 8.v.1880, 1♀.

DUSMET 1932: Coimbra, Mitra, 2♂.

Estremadura, Baixo Alentejo, Algarve.

**Genus *Physetopoda* Schuster, 1949**

10 species.

***Physetopoda daghestanica* (Radoszkowski, 1885)**

Southern Portugal, rare, 1 record.

LELEJ 2002: Portugal (as *Physetopoda compacta* (Invrea, 1957)).

Alto Alentejo, Montemor-o-Novo, Foros do Vale de Figueira, 24.vi.2011, 1♂, det. Romano, leg. A. Albernaz Valente.

**\**Physetopoda halensis* (Fabricius, 1787)**

Central Portugal, rare, 1 record.

Beira Litoral, Mira, Praia Poço da Cruz, 26.vii.2018, 1♂, det. Romano, leg. M. & E. Howe.

***Physetopoda lampedusia* (Invrea, 1957)**

Southern Portugal, rare, 1 record.

LELEJ 2002: Portugal (as *Smicromyrme negrei* = *S. lampedusia*).

Algarve, Salema, Boca do Rio, 4.iv.2015, 1♀, det. Romano, leg. Wood.

***Physetopoda ligustica* (Invrea, 1951)**

Central Portugal, rare, 1 record.

LELEJ 2002: Portugal.

Baixo Alentejo, Santo André, 2.viii.2018, 1♂, det. Romano, leg. M. & E. Howe.

***Physetopoda lucasii* (Smith, 1855)**

Southern Portugal, rare.

**- subsp. *lucasii* (Smith, 1855)**

LELEJ & SCHMID-EGGER 2005: Portugal.

**- subsp. *pseudobimaculata* (Suárez, 1959)**

PETERSEN 1988: Algarve, Castelo Branco.

***Physetopoda cf. lucasii***

Northern Portugal, rare, 1 record.

Beira alta, Manteigas, Vale do Zêzere, 14.vi.2016, 1♀, det. Romano, leg. A. Livory & R. Coulomb.

***Physetopoda nuptura* (Mercet, 1905)**

Portugal, rare.

PAGLIANO & STRUMIA 2007: Portugal.

***Physetopoda punctata* (Latreille, 1792)**

Southern Portugal, rare, 3 records.

DUSMET 1932: Évora.

DINIZ 1959: Portimão.

LELEJ 2002: Portugal.

Algarve, Altura, 23.iv.2016, 1♀, det. Romano, leg. Wood.

Algarve, Cacela Velha, 11.iv.2017, 1♀, det. Romano, leg. Cross.

Algarve, Salema, 16.iv.2016, 1♀, det. Romano, leg. Cross.

**\**Physetopoda pusilla* (Klug, 1835)**

Central & Southern Portugal, rare, 2 records.

Ribatejo, Santarém, 1.v.1977, 1♂, det. Romano. MNHNC, coll. Mendocha.

Baixo Alentejo, Vila Nova de Milfontes, 18.v.2012, 1♀, det. Romano, leg. A. Livory & R. Coulomb.

***Physetopoda rubrocincta* (Lucas, 1849)**

Portugal, rare.

LELEJ 2002: Portugal.

***Physetopoda. aff. rubrocincta***

Southern Portugal, rare, 1 record.

Algarve, Amoreira, 6.vi.2015, 1♀, det. Romano, leg. Cross.

***Physetopoda sericeiceps* (André, 1901)**

Southern Portugal, rare.

LELEJ 2002: Portugal.

PETERSEN 1988: Sagres (Algarve)

**Genus *Smicromyrme* Thomson, 1870**

6 species.

**\**Smicromyrme ingauna* Invrea, 1958**

Southern Portugal, rare, 4 records.

- Baixo Alentejo, Sines, 31.v.1970, 1♂, *det.* Romano. MNHNC, coll. Mendonça.  
Estremadura, Nazare, 19.viii.2015, 2♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.  
Alto Alentejo, Montargil, 27.ix.1980, 1♀, *det.* Romano. MNHNC, coll. Mendonça.  
Algarve, Lagoa de Budens, 29.v.2016, 1♂, *det.* Romano, *leg.* Cross.

**cf. *Smicromyrme ingauna* Invrea, 1958**

Southern Portugal, rare, 1 record.

- Algarve, Carrapateira, 15-19.ix.2014, 2♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

**[*Smicromyrme lampedusia* Invrea, 1957 = *Physetopoda lampedusia*]**

***Smicromyrme metanotalis* (André, 1902) ssp. *andradei* (Suárez, 1954)**

(=*Myrmilla andradei* = *Smicromyrme andradei*)

Portugal, rare.

- LELEJ 2002: Portugal.

***Smicromyrme partita* (Klug, 1835)**

- **subsp. *partita* (Klug, 1835)**

Widespread, frequent, 24 records.

- LELEJ 2002: Portugal.

DINIZ 1959: Évora, Mata de Leiria.

Trás-os-Montes, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

- **subsp. *propodealis* Suárez 1959**

Portugal, rare.

- LELEJ 2002: Portugal.

**\**Smicromyrme cf. ruficollis* (Fabricius, 1793)**

Southern Portugal, rare, 1 record.

- Algarve, Aljezur, Odeceixe, ix.2008, 1♀, *det.* Romano, *leg.* A. Livory & R. Coulomb.

**\**Smicromyrme rufipes* (Fabricius, 1787)**

Central Portugal, rare, 1 record.

- Beira Baixa, Caramoulo, 29.vii.2018, 1♂, *det.* Romano, *leg.* M. & E. Howe.

**[*Smicromyrme subcomata* (Wesmael, 1851)]**

Not listed in LELEJ 2002, the identity of these specimens and the presence of this species in Portugal remains unconfirmed.

- DINIZ 1989: Coimbra, Ocreza, Seixal, Soalheira 11♂.

**\**Smicromyrme suberrata* Invrea, 1957**

Central & Southern Portugal, scarce, 11 records.

- Beira Litoral, Fátima, 23-25.vii.1974, 3♂, *det.* Baldock. MNHNC, coll. Mendonça.  
Beira Litoral, Leiria, Alvaiazere, Almoester, 9.viii.2016, 1♂, *det.* Baldock, *leg.* R. Andrade.  
Beira Baixa, Castelo Branco, 30.ix.2018, 1♂, *det.* Baldock, *leg.* S. Ferreira.  
Estremadura, Cascais, 28.vi.1983, 1♂, *det.* Romano, MNHNC, coll. Mendonça.  
Ribatejo, Coruche, 6.viii.2016, 1♂, *det.* Romano, A. Albernaz Valente.  
Ribatejo, Santarém, 19.viii.2001, 1♂, *det.* Baldock. MNHNC, coll. Mendonça.  
Baixo Alentejo, Vila Nova de Milfontes, 11.vii.1972, 1♂, *det.* Baldock. MNHNC, coll. Mendonça.  
Algarve, Cabanas, 4.x.2004, 1♂, *leg.* R. Boor.  
Algarve, Lagoa, Sesmarias, 19/20.v.1995, 3♂, *det.* Romano *leg.* D. Keen.  
Algarve, Silves, 12.x.2010, 1♂, *det.* Romano 2012, *leg.* Baldock.  
Algarve, Vilarinha, 21.ix.2018, 1♂, *det.* & *leg.* Cross.

## DASYLABRINAE

**Genus *Dasylabris* Radoszkowski, 1885**

5 species.



***Dasylabris atrata* (Linnaeus, 1767)**

Central & Southern Portugal, frequent, 23 records. (Fig. 8).

PETERSEN 1988: Praia da Castela.

LELEJ 2002: Portugal.

Estremadura, Baixo Alentejo, Algarve.

**\**Dasylabris egregia* (Klug, 1835)**

Southern Portugal, rare, 2 records.

Baixo Alentejo, Comporta, Carvalho, 22.vii.2016, 1♀, *det.* Romano, *leg.* J. Halada, coll. Romano.

Baixo Alentejo, Santo André, 5.viii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

***Dasylabris iberica* Giner, 1942**

Southern Portugal, scarce, 7 records.

DINIZ 1960B: Portugal.

LELEJ 2002: Portugal.

Baixo Alentejo, Melides, 24.vii.2016, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Budens, 6.iv.2005, 1♀, *det.* Romano, *leg.* M. & E. Howe.

Algarve, Cabo de São Vicente, 11.iv.2006, 18.iv.2006, 2♀, *det.* Romano/Baldock, *leg.* M. & E. Howe.

Algarve, Carrapateira, 6.iv.2005, 1♂, *det.* Romano, *leg.* M. & E. Howe.

Algarve, Carrapateira dunes, 4.x.2014, 1♀, 16.v.2016, 1♂, *det.* Romano, *leg.* Cross.

***Dasylabris lugubris* (Fabricius, 1804)**

Central and Southern Portugal, frequent, 16 records.

DINIZ 1960B: (as *Dasylabris italica* var. *lugubris*) Portugal.

PETERSEN 1988: Albufeira, Algarve.

Estremadura, Baixo Alentejo, Algarve.

***Dasylabris maura* (Linnaeus, 1758) ssp. *clausa* (Lepelletier, 1845)**

Widespread, rare, 3 records.

DINIZ 1960B: (as *Dasylabris maura* L.) Portugal.

PETERSEN 1988: Douro.

Douro Litoral, Loivos do Monte, 8.ix.2016, 1♂, *det.* Cross/Romano, *leg.* Cross; 2.ix.2018, 1♂, *det.* & *leg.* Cross.

Beira Baixa, Caramoulo, 24.vii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

**Genus *Stenomutilla* André, 1896**

2 species.

***Stenomutilla argentata* (Villers, 1789)**

Central and Southern Portugal, frequent, 24 records.

DINIZ 1960B: (as *Mutilla argentata* Vill. var. *bifasciata* Klug) Portugal.

PETERSEN 1988: Portugal.

KUHLMANN 1996: Penhas da Saúde 1500m, Serra da Estrela, 7.vi.1989, 1♀, *det.* B. Petersen.

Beira Alta, Estremadura, Baixo Alentejo, Algarve.

***Stenomutilla collaris* (Fabricius, 1787)**

Southern Portugal, rare, 1 record.

LELEJ 2002: Portugal.

Algarve, Aljezur, Ponte de Atalaia, 2.v.2005, 1♀, *det.* & *leg.* Smit.

## POMPILIDAE

The taxonomy and nomenclature follow WAHIS (2016), except where otherwise stated. (Unfortunately this website is currently being updated and can only be consulted genus by genus.)

111 species from 30 genera.

## CEROPALINAE

**Genus *Ceropales* Latreille, 1796**

5 species.

***Ceropales albicincta* (Rossius, 1790)**

Central Portugal, rare.

WOLF *et al.* 2009: Setúbal, 1966.

***Ceropales bipartita* Haupt, 1962**

Northern and Southern Portugal, rare, 2 records.

WOLF *et al.* 2009: Resende, Douro, 1953, 1967; Milfontes, 1987; Lagos, 1987.

Trás-os-Montes, Bragança, Alfândega da Fé, 23.vii.2015, 1♀, *det.* Schmid-Egger, *leg.* A. Penado.

Algarve, Monchique, Casa Moinho, 26.vii.2015, 1♂, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

***Ceropales helvetica* Tournier, 1889**

Central and Southern Portugal, frequent, 21 records.

WOLF *et al.* 2009: Cape Africa, Lisboa, 1952; Caparica, 1952; Milfontes, 1980; Sobreda, Lisboa, 1985, 1986; Sines; Loulé.

Estremadura, Baixo Alentejo, Algarve.

***Ceropales maculata* (Fabricius, 1775)**

Central and Southern Portugal, scarce, 6 records.

DUSMET 1931: Almodôvar, 1921, 1♀.

WOLF *et al.* 2009: Coimbra, 1960, 1965; Praia do Bispo, 1996.

Beira Litoral, Aveiro, Estarreja, Canelas, 20.vii.2015, 1♂, *det.* Baldock, *leg.* A. Gonçalves.

Algarve, Carrapateira, 19.x.2016, 13.xi.2016, 3♀, *det.* & *leg.* Cross.

Algarve, Carrapateira, 3.x.2017.10.x.2017, 24.x.2017, 2♂, 1♀, photos & field records all *det.* Cross.

**\**Ceropales variegata* (Fabricius, 1798)**

Southern Portugal, scarce, 10 records. (Fig. 9).

Algarve, Carrapateira, 8.vi.2015, 1♂; 13.x.016, 14.x.2016, 19.x.2016, 2♂, 4♀; all *det.* & *leg.* Cross.

Algarve, Carrapateira, 9.x.2017, 1♀; 24.x.2017, 1♀; 30.x.2017, photos & field records all *det.* Cross.

Algarve, Guia, 17.v.1999, 1♀, *det.* & *leg.* Baldock.

Algarve, Praia do Vale da Lama, 21.v.2018, 1♂, *det.* & *leg.* Cross.

Algarve, São Brás de Alportel, São Romão, viii.1977, 1♀, *det.* Wahis, *leg.* J. Passos de Carvalho.

## PEPSINAE

Genus ***Auplopus* Spinola, 1841**

3 species.

**\**Auplopus albifrons* (Dalman, 1923)**

Southern Portugal, rare, 2 records.

Baixo Alentejo, Santa Clara a Velha, 2.v.2002, 1♂, *det.* Wahis *leg.* Baldock.

Algarve, Bordeira, 9.v.2017, 1♂, *det.* Schmid-Egger, *leg.* Cross.

***Auplopus carbonarius* (Scopoli, 1763)**

Widespread, frequent, 21 records.

DUSMET 1932: Alamo, Barrocal, Mitra.

DINIZ 1959: Lisboa, Monte das Flores.

WOLF *et al.* 2009: Coimbra; Praia da Rocha, Portimão, 1974; Sobreda, Lisboa, 1985, 1986; Carcavelos, 1964; Coimbra, 1964; Alvor, 1975; Santa Barbara, Algarve; Fafe, 1994; Milfontes, 1987; Lagoa de Albufeira, Lisboa, 1985.

Minho, Trás-os-Montes, Beira Litoral, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

***Auplopus rectus* (Haupt, 1927)**

Widespread, scarce, 12 records.

WOLF *et al.* 2009: Alvor, 1987; Lagos, 1987; Santa Barbara, Algarve; Sobreda, Lisboa, 1985.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 27.vii-9.viii.2015, 1♂, 13♀, *det.* Baldock, *leg.* A. Penado.

Douro Litoral, Vila Nova de Gaia, Oliveira do Douro, 19.vi.2009, 1♀, *det.* Baldock, *leg.* R. Andrade.

Alto Alentejo, Évora, Montemor-o-novo, Foros de Vale Figueira, 16.viii.2016, 22.viii.2016, 2♀, *det.* Baldock, *leg.* A. Albernez Valente.

Algarve, Barragem de Bravura, 24.viii.2015, 1♂, *det.* & *leg.* Cross.

Algarve, Carrapateira dunes, 12.x.2010, 1♀, *det.* Wahis, *leg.* Baldock; 15.ix.2016, 1♂, *det.* & *leg.* Cross.

Algarve, Monchique, Casa Moinho, 20.vii.2015, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Porto Covo, 24.ix.2014, 1♀, *det.* A. Livory/Baldock, *leg.* A. Livory & R. Coulomb.  
Algarve, Sagres, 20.vii.2012, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.  
Algarve, Salema, Boca do Rio, 19.ix.2015, 1♀, *det.* Baldock, *leg.* Wood; 1.x.2017, 1♀, *det.* & *leg.* Cross.  
Algarve, Silves, 22.vi.2014, 1♀, *det.* Schmid-Egger, *leg.* Baldock.

**Genus *Caliadurgus* Pate, 1946**

1 species.

***Caliadurgus fasciatellus* (Spinola, 1808)**

Central Portugal, rare, 1 record.

WOLF et al. 2009: Coimbra, 1964.

Baixo Alentejo, Cercal, Janeirinha de Cima, 25.vii.2016, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

**Genus *Cryptocheilus* Panzer, 1806**

13 species.

***Cryptocheilus discolor* (Fabricius, 1793)**

Southern Portugal, rare.

WOLF et al. 2009: Lagos, 1987.

***Cryptocheilus egregius* (Lepelletier, 1845)**

Widespread, rare, 6 records.

DUSMET 1932: Aldeia Nova de São Bento, 1921, 1♂.

WOLF et al. 2009: Sintra.

Trás-os-Montes, Bragança, Alfândega da Fé, 26.vi.2014, 30.vi.2014, 2♀, *det.* Baldock/Schmid-Egger, *leg.* A. Penado.

Alto Alentejo, Montemor-o-Novo, Foros de Vale de Figueira, 30.viii.2016, 1♀, *det.* Cross, *leg.* A. Albernaz Valente.

Baixo Alentejo, Praia do Monte Velho, 6.viii.2018, 1♀, *det.* Cross, *leg.* M. & E. Howe.

Algarve, Amoreira, 16.vi.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Praia do Vale da Lama, 21.v.2018, 1♀, *det.* Cross.

***Cryptocheilus elegans* (Spinola, 1806)**

Northern Portugal, rare.

WOLF et al. 2009 (as *Cryptocheilus elegans tripunctatus* Spinola): Fafe, 1994.

***Cryptocheilus fabricii* (vander linden, 1827)**

Northern and Central Portugal, rare, 1 record.

WOLF et al. 2009 (as *Cryptocheilus fabricii meridionalis* Junco): Lisboa; Guereivas, 1969, 1970 (location unclear).

Douro Litoral, Amarante, 30.viii.2018, 1♀, *det.* & *leg.* Cross.

***Cryptocheilus fischeri* (Spinola, 1838)**

Central and Southern Portugal, rare, 1 record.

WOLF et al. 2009 (as *Cryptocheilus confinis* Haupt): Bairro Domingos, Lisboa; Tavira, 1971.

Algarve, Salema, 18.iv.2016, 1♂, *det.* Schmid-Egger, *leg.* Cross.

***Cryptocheilus hispanicus* Suster, 1924**

Widespread, frequent, 18 records.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, viii.1987, 2♀, *det.* H. Wolf.

WOLF et al. 2009: Sobreda, Lisboa, 1985; Santo Tirso; Porto de Rei, Resende; Fafe, 1994.

Minho, Trás-os-Montes, Douro Litoral, Beira Alta, Estremadura, Ribatejo, Alto Alentejo, Algarve.

***Cryptocheilus infumatus* (Palma, 1869)**

Southern Portugal, rare, 2 records.

DINIZ 1959 (as *Cryptocheilus dimidiatipennis* Costa): South-west Portugal.

WOLF et al. 2009: Lisboa, 1948.

Algarve, Pêra, Praia Grande, 20.vi.2015, 1♀, *det.* Schmid-Egger, *leg.* Cross.

Algarve, Pêra, Praia Grande, 26.v.2018, 4♂, *det.* Cross/Schmid-Egger, *leg.* Cross.

**\**Cryptocheilus juncoi* Wahis, 1986**

Northern Portugal, rare, 2 records.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 22.vi.7.viii.2014, 1♂, 1♀; 22.vi.2015 - 27.viii.2015, 2♂, 1♀, all *det.* Schmid-Egger, *leg.* A. Penado.

***Cryptocheilus notatus* (Rossius, 1792)**

Widespread, frequent, 19 records.

DUSMET 1932: Mata de Leiria, Alamo, 1921, 3♀.

DINIZ 1959: Mitra, Vilela.

WOLF *et al.* 2009 (as *Cryptocheilus notatus melanius* Lepeletier): Resende; Sobreda, Lisboa, 1985; Coimbra; Figueira da Foz, 1967; Lagoa de Albufeira, Lisboa, 1968; (as *Cryptocheilus notatus notatus*): Fafe, 1994.

Minho, Trás-os-Montes, Douro Litoral, Beira Litoral, Beira Alta, Beira Baixa, Estremadura, Baixo Alentejo, Algarve.

***Cryptocheilus octomaculatus* (Rossius, 1790)**

Males of this species are dimorphic, coming in two forms: one with an elongated head and pronotum and one with normal proportions, like those of the female (DAY 1984). Males of the elongate morph have been seen at Amoreira in 2015 and Pêra in 2015.

Central and Southern Portugal, scarce, 13 records. (Fig. 10).

WOLF *et al.* 2009 (as *Cryptocheilus octomaculatus eatoni* Saunders): Lagos, 1987; Monsanto, Lisboa; Oeiras, 1956.

Estremadura, Setúbal, PN Arrábida, 17.vii.1978, 1♀ *det.* Schmid-Egger, MNHNC, coll. Mendocça.

Ribatejo, Santarém, 18.viii.1977, 1♀; *det.* Schmid-Egger, MNHNC, coll. Mendocça.

Alto Alentejo, Montemor-o-Novo, Foros de Vale de Figueira, 25.vi.2011, 1♀; 20.v.2011, 1♂, both *det.* Baldock, *leg.* A. Albernaz Valente.

Algarve, Alvor, Abicada, 10.vi.2015, 1♀, *det.* Baldock, *leg.* J. D'Haeseleer.

Algarve, Amoreira, 16.vi.2015, 1♀, 1.vi.2017, 1♀, field; both *det.* & *leg.* Cross.

Algarve, Burgau, 27.vi.2018, 1♀, *det.* Cross.

Algarve, Lagos, 10 km west of, vii.2001, *det.* & *leg.* Schmid-Egger.

Algarve, Pêra, Praia Grande, 29.vi.2015, 1♂; 31.v.2017, 1♀; 21.vi.2018, 1♂; all *det.* & *leg.* Cross

Algarve, Salema, 29.v.2017, 2♂, *det.* & *leg.* Cross.

***Cryptocheilus rubellus* (Eversmann, 1846)**

Southern Portugal, rare, 4 records.

DUSMET 1932: Mitra, 1921, 1♂, 1♀.

WOLF *et al.* 2009: Aljustrel.

Baixo Alentejo, Vila Nova de Milfontes, 10.vii.1971, 1♀; 20.vii.1971, 1♀; 8.vii.1972, 1♀; 22.vii.1972, 1♀, all *det.* Baldock, MNHNC, coll. Mendocça.

***Cryptocheilus variabilis* (Rossius, 1790)**

Males of this species are polymorphic, with an elongate form of the male (DAY 1984). There is one record of a male of the elongate morph: Algarve, Guia, 15.vii.2009, *det.* Wahis, R., *leg.* Baldock.

Central and Southern Portugal, frequent, 20 records.

WOLF *et al.* 2009 (as *Cryptocheilus variabilis nigripes* Costa): Lisboa, 1948; Portimão, 1977, 1978; Aljustrel, 1953.

Estremadura, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

***Cryptocheilus versicolor* (Scopoli, 1763)**

Northern Portugal, rare.

WOLF *et al.* 2009 (as *Cryptocheilus versicolor atripes* Haupt): Fafe, 1994.

**Genus *Dipogon* Fox, 1897**

2 species.

**\**Dipogon subintermedius* (Magretti, 1886)**

Southern Portugal, rare, 3 records.

Alto Alentejo, Montemor-o-Novo, Évora, 24.vi.2011, 1♀, *det.* Wahis, *leg.* A. Albernaz Valente.

Algarve, Amoreira, 23.x.2017, 1♀, *det.* & *leg.* Cross.

Algarve, Salema, 29.v.2017, 1♀, *det.* & *leg.* Cross.

***Dipogon variegatus* (Linnaeus, 1758)**

Widespread, common, 40 records.

DUSMET 1931: Aldeia Nova de São Bento, 1921, 1♀.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde 1500m, 24.vii.1990, 1♀, *det.* H. Wolf.

WOLF *et al.* 2009: Lagos, 1983; Santa Barbara, Algarve; Sobreda, Lisboa, 1986; Coimbra; Alvor, 1987  
Trás-os-Montes, Beira Alta, Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Priocnemis* Schioedte, 1837**

15 species.

***Priocnemis bellieri* Sichel, 1860**

Widespread, rare, 3 records.

WOLF *et al.* 2009: (as *Priocnemis bellieri addita* Junco) Sagres; Coimbra; São João de Filori; Resende,  
Douro; Monsanto, Lisboa.

Alto Alentejo, Évora, Montemor-o-Novo, Foros de Vale de Figueira, 7.v.2011, 11♂, *det.* Baldock/  
Schmid-Egger, *leg.* A. Albernaz Valente.

Algarve, Aljezur, Vale de Telha, W of, 1-9.v.2016, 1♂, *det.* Schmid-Egger, *leg.* Wood.

Algarve, Lagos, Ponta da Piedade, 17.x.2018, 1♀, *det.* & *leg.* Cross.

Algarve, Monte Clérigo, 14.v.2016, 2♀, *det.* Schmid-Egger, *leg.* Cross.

**\**Priocnemis castillanica* Wahis, 1992**

Previously known only from Spain.

Southern Portugal, rare, 1 record.

Algarve, Mexilhoeira Grande, 1.v.2005, 1♂, *det.* Wahis, *leg.* Smit.

***Priocnemis diversa* Junco y Reyes, 1946**

Widespread, scarce, 7 records.

WOLF *et al.* 2009: Algarve, Lagos, 1983; WOLF 2009 (as *Priocnemis pumiloides* Wolf): Abrunhosa.

Trás-os-Montes, Bragança, Alfândega da Fé, 4.viii. 2014, 1♂, *det.* Schmid-Egger; 24.v-4.viii. 2015,  
5♂, *det.* Wahis, all *leg.* A. Penado.

Estremadura, Cabo Espichel, 4.vi.2011, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

Ribatejo, Santarém, Bemposta, 15.v.2009, 1♂, *det.* Wahis, *leg.* EB, MNHNC.

Algarve, Salema, 14.iv.2016, 1♀; 9.v.2016, 1♀, both *det.* Schmid-Egger, *leg.* Cross.

Algarve, Sesmarias, Lagoa, 20.v.1995, 1♀, *det.* Wahis, *leg.* D. Keen.

***Priocnemis faillae* De Stefani, 1886 ssp. *corax* Gussakovskij, 1930**

West-Mediterranean; Iberian endemic subspecies.

Widespread, frequent, 16 records.

WOLF *et al.* 2009: Coimbra, 1968; Estoril, 1946, 1953; Abrunhera; Carcavelos; Armação de Pêra;  
Sobreda, Lisboa, 1985; Castelo Branco, 1985; Figueira da Foz; Marateca; Milfontes, 1987; Cascais;  
Escolar; Seixal; Tróia; Quartiera, 1985.

Trás-os-Montes, Beira Litoral, Beira Baixa, Estremadura, Ribatejo, Baixo Alentejo, Algarve.

***Priocnemis fallax* Verhoeff, 1922**

Central Portugal, rare.

WAHIS 1997: Portugal.

WOLF *et al.* 2009: Sobreda, Lisboa, 1985; Coimbra, 1968; Miranda Moinhos, 1968; Miranda do Corvo,  
1966; Pinhal de Marrocos, 1968.

***Priocnemis fastigata* Haupt, 1934**

Central Portugal, rare.

WOLF *et al.* 2009: Carcavelos; Estoril.

***Priocnemis minuta* (Vander Linden, 1827)**

Northern Portugal, rare, 3 records.

WOLF *et al.* 2009 (as *Priocnemis minuta italica* Haupt): Resende, Douro, 1967.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 6.viii.2014, 1♀; 25.vi.2015, 1♂; 28.vii.2015, 1♀,  
*det.* Schmid-Egger, *leg.* A. Penado.

***Priocnemis parvula* Dahlbohm, 1845**

Northern Portugal, rare.

WOLF *et al.* 2009: Fafe, 1994.

***Priocnemis perturbator* (Harris, 1780)**

Portugal, rare.

WOLF & DINIZ 1970 (as *Priocnemis scurialensis* Junco y Reyes): Portugal.

***Priocnemis pogonioides* Costa, 1883**

Central Portugal, rare.

WOLF *et al.* 2009: Sobreda, Lisboa, 1985.

***Priocnemis propinqua* (Lepeletier, 1845)**

Widespread, rare, 2 records.

WOLF *et al.* 2009: Amarante, 1990; Baixo Alentejo; Estoril; Marateca; Monte Gordo; Abrunhosa.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 24.vi.2015, 1♀, *det.* Schmid-Egger, *leg.* A. Penado  
Algarve, Amoreira, 30.x.2016, 1♀, *det.* & *leg.* Cross.

***Priocnemis pusilla* (Schioedte, 1837)**

Southern Portugal, rare.

WOLF *et al.* 2009: Portimão, 1975.

***Priocnemis rufozonata* Costa, 1883**

Central and Southern Portugal, rare.

WOLF *et al.* 2009 (as *Priocnemis rufozonata rufozonata*): Sobreda, Lisboa, 1985; (as *Priocnemis rufozonata atlantica* Wolf): Algarve.

**\**Priocnemis rugosa* Suster, 1922**

Southern Portugal, rare, 1 record.

Algarve, Lagos, Ponta da Piedade, 20.iii.2015, 1♀, *det.* Schmid-Egger, *leg.* Cross.

**\**Priocnemis vulgaris* (Dufour, 1841)**

Southern Portugal, rare, 1 record.

Algarve, Armação de Pêra, 20.iv.2006, 1♂, *det.* Wahis, *leg.* Baldock.

## POMPILINAE

**Genus *Agenioideus* Ashmead, 1902**

9 species.

**\**Agenioideus apicalis* (Vander Linden, 1827)**

Central Portugal, rare, 2 records.

Beira Alta, Manteigas, Vale do Zêzere, 27.viii.2015, 1♀, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

Estremadura, São Martinho do Porto, 21.viii.2015, 1♂, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

***Agenioideus ciliatus* (Lepeletier, 1845)**

Central and Southern Portugal, rare, 2 records.

GROS & WAHIS 2002: Loulé, 21.vii.1996, 1♀, *leg.* E. Gros.

WOLF *et al.* 2009: Portimão, 1951; Sobreda, 1985, 1986.

Beira Alta, Gouveias, Tarouca, 3.vii.2008, 1♀, *leg.* P. L'Homme.

Algarve, Carvoeiro, 17.vi.1988, 1♂, *det.* Wood, *leg.* J.W. Ismay.

**\**Agenioideus cinctellus* (Spinola, 1808)**

Southern and Northern Portugal, rare, 2 records.

Douro Litoral, Porto, Povea de Varzim, Estela, 14.vii.2013, 1♂, 1♀, *det.* Schmid-Egger, *leg.* R. Andrade.

Algarve, Silves, São Marcos da Serra, pan traps, 28.ix.2010, 2♂, 1♀, *det.* Schmid-Egger, *leg.* R. Odelouca.

***Agenioideus coronatus* (Nouvel & Ribaut, 1958)**

West-Mediterranean.

Southern Portugal, rare.

GROS & WAHIS 2002: Sagres, 16.vi.1984, 1♀, *leg.* E. Gros; 18.vi.1993, 1♂, *leg.* E. Gros.

***Agenioideus dichrous* (Brullé, 1840)**

Central and Southern Portugal, rare, 4 records.

WOLF *et al.* 2009: Tróia, Setúbal; Milfontes, 1980; Sobreda, 1985.

Baixo Alentejo, Zambujeira do Mar, 18.vii.2012, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

Algarve, Aljezur, Praia de Monte Clérigo, 25.vii.2015, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Algarve, Salema, Boca do Rio, 19.ix.2015, 1♀, *det.* Wood/Baldock, *leg.* Wood.

***Agenioideus excisus* (Morawitz, 1890)**

Southern Portugal, rare.

GROS & WAHIS 2002: Garrão, Loulé.

WOLF *et al.* 2009: Portimão.

***Agenioideus nubecula* (Costa, 1874)**

Widespread, scarce, 11 records.

WOLF *et al.* 2009: Pegões, 1952; Cascais, 1966; Sines; Estoril; Pessagueiro; Santa Bárbara; Milfontes, 1980; Sobreda, 1985, 1986.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 24.v-24.viii.2015, 2♂, 6♀, *det.* Baldock, *leg.* A. Penado.

Beira Alta, Manteigas, Rota do Sol, 27.viii.2015, 1♀, *det. & leg.* A. Livory & R. Coulomb.

Estremadura, São Martinho do Porto, 21.viii.2015, 1♀, *det. & leg.* A. Livory & R. Coulomb.

Baixo Alentejo, Praia de Odeceixe, 26.vii.2015, 1♂, *det.* Baldock, *leg.* M. & E. Howe.

Baixo Alentejo, Cercal, Janeirinha de Cima, 17.vii.2016, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Amoreira, 25.viii.2015, 1♀, *det. & leg.* Cross.

Algarve, Lagos, Ponte da Piedade, 16.ix.2015, 1♀, *det.* Baldock, *leg.* Wood.

Algarve, Salema, Boca do Rio, 19.ix.2015, 1♀, *det.* Baldock, *leg.* Wood; 18.xi.2015, 1♀, *det. & leg.*

Cross 21.x.2017, 1♀, *det. & leg.* Cross.

Algarve, Silves, 10.vi.2011, 1♂, 2♀, *det.* Wahis, *leg.* Baldock.

***Agenioideus sericeus* (Vander Linden, 1827)**

Central and Southern Portugal, rare, 3 records.

WOLF *et al.* 2009: Quinta do Mato; Sobreda, 1985, 1986.

Estremadura, Lisboa, Sintra, Almargem do Bispo, 21.vii.2013, 1♀, *det.* Schmid-Egger, *leg.* R. Andrade

Algarve, Ponta do Castelo, 19.iv.2017, 1♂, *det. & leg.* Smit.

Algarve, Silves, San Marcos da Serra, pan trap, 28.ix.2010, 1♀, *det.* Schmid-Egger, *leg.* R. Odelouca.

***Agenioideus usurarius* (Tournier, 1889)**

Central and Northern Portugal, rare, 3 records.

WOLF *et al.* 2009: Lisboa; Sobreda, 1985.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 30.vi.2014, 1♀; 26.viii.2015, 1♀, both *det.* Schmid-Egger, *leg.* A. Penado.

Beira Alta, Gouveães, Tarouca, 3.viii.2008, 1♀, *leg.* P.L'Homme.

**Genus *Amblyellus* Day, 1981**

1 species.

***Amblyellus hasdrubal* (Kohl, 1894)**

Central and Southern Portugal, rare, 1 record.

WAHIS 2005: Coimbra Botanical Garden, 18.viii.1984, 1♂, *leg.* P. van Ooijen.

WOLF *et al.* 2009: Estoril; Sobreda, 1985.

Algarve, Salema, Boca do Rio, 19.ix.2015, 1♀, *det.* Schmid-Egger, *leg.* Wood.

**Genus *Anoplius* Dufour, 1834**

5 species.

***Anoplius concinnus* (Dahlbom, 1843)**

Widespread, rare, 4 records.

DUSMET 1932: Serra da Boa Viagem.

DINIZ 1959: Pinhal dos Medos.

Trás-os-Montes, Bragança, Reconco, 3.vii.2016, 1♂, 1♀, *det.* Schmid-Egger, *leg.* Wood.

Beira Litoral, Aguada, Talhada, 24.vii.2018, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Baixo Alentejo, Praia da Foz dos Ouriços, 18.vii.2016, 2♂, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Algarve, Silves, San Marcos da Serra, pan traps, 28.ix.2010, 4♂, *det.* Schmid-Egger, *leg.* R. Odelouca.

***Anoplius infuscatus* (Vander Linden, 1827)**

Widespread, scarce, 14 records.

DINIZ 1959: Mitra.

WOLF *et al.* 2009 (as *Anoplius aeruginosus* Tournier): Quarteira 2005; (as *Anoplius aeruginosus lusitanicus* Wolf & Diniz): Coimbra, 1966; Trafaria, Cova da Vapor, 22.vii.1951, holotype 1♀, *leg.* N.F. d'Andrade; Tróia, Setúbal; (as *Anoplius infuscatus meticulousus* Costa): Aljustrel, Cape Africa, 1952; Coimbra; Nazaré, 1980; Sobreda, 1985; Amarante, 1990; Fafe, 1994; Castro Marim, 1995.

Beira Baixa, Caramoulo, Mamoa das Ladeiras, 27.vii.2018, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Estremadura, São Martinho do Porto, 21.viii.2015, 1♂, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.  
Baixo Alentejo, Praia da Foz dos Ouriços, 18.viii.2016, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Baixo Alentejo, Moura, 27.ix.2014, 1♂, *det.* Wahis, *leg.* A. Livory & R. Coulomb.  
Algarve, Amoreira, 20.xi.2015, 1♀, *det.* & *leg.* Cross.  
Algarve, Amoreira, 23.v.2017, 1♀, *det.* Schmid-Egger, *leg.* Cross.  
Algarve, Carrapateira, 6.iv.2005, 2♀, 16.iv.2006, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Algarve, Odeceixe, 4.vii.2009, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.  
Algarve, Olhão, Praia Fuzeta, 1.viii.2015, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Algarve, Salema, Praia da Figueira, 22.ix.2015, 2♂, 4♀, *det.* Baldock, *leg.* Wood.  
Algarve, Silves, 22.vi.2014, 1♂, *det.* Schmid-Egger, *leg.* Baldock.  
Algarve, Tavira, Forte do Rato, 22.iv.2016, 1♀, *det.* & *leg.* Wood.  
Algarve, Tavira, Cabanas, 31.v.2016, 2♀, *det.* & *leg.* A. Livory & R. Coulomb.

***Anoplius nigerrimus* (Scopoli, 1763)**

Widespread, rare, 2 records.

DINIZ 1959: Mata de Leiria.

WOLF *et al.* 2009: Coimbra; Fafe 1991.

Douro Litoral, Porto, Vila do Conde, Malta, 14.vi.2012, 2♂, *det.* Baldock/ Schmid-Egger, *leg.* R. Andrade.

Baixo Alentejo, Almogrove, 22.ix.2014, 1♀, *det.* & *leg.* A. Livory & R. Coulomb.

***Anoplius samariensis* (Pallas, 1771)**

Northern Portugal.

WOLF *et al.* 2009 (as *Anoplius samariensis grandis* Eversmann): Resende; (as *Anoplius samariensis przewalskii* Radoszkowski): Resende.

***Anoplius viaticus* (Linnaeus, 1758)**

Widespread, scarce, 7 records.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde, 2.vi.1989, 1♀; Nave de Santo António, 21.vii.1990, 1♀, both *det.* H. Wolf.

WOLF *et al.* 2009 (as *Anoplius viaticus nigripennis* Tournier): Estoril, 1954; Resende; Lisboa, 1979, 1985; Oeiras; Sobreda, 1985; Braga, 1992; Fafe, 1994.

Trás-os-Montes, Vila Real, Mascoselo, 31.viii.2018, 1♂, *det.* & *leg.* Cross.

Douro Litoral, Amarante, Chapa, 13.vi.2017, 1♀, *det.* & *leg.* Cross.

Beira Alta, Paços da Serra, 13.viii.1977, 1♀, *det.* Baldock, MNHNC, coll. Mendonça.

Alto Alentejo, Montargil, 8.iv.1973, 1♀, *det.* Baldock, MNHNC, coll. Mendonça.

Algarve, Bensafirim, 10.iii.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Carrapateira, 3.x.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Sagres, 6.iv.2005, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

**Genus *Anospilus* Haupt, 1929**

4 species.

***Anospilus barbilabris* Wolf, 1966**

Iberian endemic.

Central and Southern Portugal, rare, 3 records.

WOLF *et al.* 2009: Cascais; Lagos, 1987.

Estremadura, Cabo Espichel, 16.v.2012, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

Algarve, Lagoa, Sesmarias, 20.v.1996, 1♀, *det.* Wahis, *leg.* D. Keen.

Algarve, Lagos, Ponte da Piedade, 26.ix.2014, 1♀, *det.* Wahis, *leg.* Cross.

***Anospilus intactus* (Tournier, 1889)**

Iberia and Morocco.

Central and Southern Portugal, rare, 3 records.

WOLF *et al.* 2009: Brussino, 1984; Marateca/Baixo Alentejo, 1958; Milfontes, 1980.

Baixo Alentejo, Praia Fonte do Cortiço, 1.viii.2018, 1♀, 2.viii.2016, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Baixo Alentejo, Praia do Monte Velho, 2.viii.2018, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.



***Anospilus larachei* Junco y Reyes, 1961**

Iberia and Morocco.

Central Portugal, rare.

WOLF *et al.* 2009: Lisboa.

***Anospilus orbitalis* (Costa, 1863)**

Widespread, scarce, 15 records.

KUHLMANN 1996 (as *Anospilus orbitalis luctigera* Costa): Serra da Estrela, Unhais, 30.vii.1990, 1♀, *det.* H. Wolf.

WOLF *et al.* 2009 (as *Anospilus orbitalis luctigera* Costa): Resende 1967; Cascais 1967; Setúbal 1965; Algarve 1978; Milfontes 1980; Lagos 1983; Brussino 1984; Sobreda 1985; Quarteira 1985; Fafe 1994; Coimbra, Estoril; Massorra; Monchique; Pessagueiro.

Beira Litoral, Fátima, 17.vii.1974, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendoça.

Beira Alta, Manteigas, Poço do Inferno, 26.viii.2015, 3♀; Rota da Carvão, 28.viii.2015, 2♀, *det. & leg.* A. Livory & R. Coulomb.

Beira Alta, Seia, Paços da Serra, 25.x.1970, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendoça.

Beira Baixa, Freimoninho, Quinta da Meiroa, 23.vii.2018, 1♀, 26.vii.2018, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendoça.

Baixo Alentejo, Santo André, Praia do Monte Velho, 1.viii.2018, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendoça.

Algarve, Carrapateira, 19.x.2014, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb; 17.ix.2015, 1♀, *det.* Baldock, *leg.* Wood.

Algarve, Cerro de São Miguel, 28.iv.2016, 1♀, *det. & leg.* Wood.

Algarve, Monchique, 4.xi.2005, 1♀, *det.* Wahis, *leg.* Smit.

Algarve, Odeceixe, 4.vii.2009, 2♀; 25.v.2011, 1♀, all *det.* Wahis, *leg.* A. Livory.

Algarve, Ponta de Castelo, 17.iv.2017, 2♀, *det. & leg.* Smit.

Algarve, Sesmarias, Lagoa, 20.v.1996, 1♀, *det.* Wahis, *leg.* D. Keen.

**Genus *Aporinellus* Banks, 1911**

2 species.

***Aporinellus moestus* (Klug, 1834)**

Central and Southern Portugal, rare, 3 records.

WOLF *et al.* 2009: Estoril, Milfontes, 1980; Nazaré, 1980.

Estremadura, Nazaré, north dunes, 18.viii.2015, 1♂, *det. & leg.* A. Livory & R. Coulomb; 23.viii.2015, 1♂, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

Algarve, Pêra dunes, 17.vii.2009, 1♀, *det.* Wahis, *leg.* Baldock.

***Aporinellus sexmaculatus* (Spinola, 1805)**

Widespread, frequent, 17 records.

KUHLMANN 1996: Serra da Estrela, Unhais, 30.vii.1990, 1♂, 1♀, *det.* H. Wolf.

WOLF *et al.* 2009 (as *Aporinellus sexmaculatus asiaticus* Gussakovskij): Resende; Lisboa; Baixo Alentejo; Sobreda, 1985; (as *Aporinellus sexmaculatus sexmaculatus*): Portimão; Sobreda, 1985; Olhão, 1987; Coimbra, 2008.

Trás-os-Montes, Douro Litoral, Beira Alta, Estremadura, Alto Alentejo, Algarve.

**Genus *Aporus* Spinola, 1808**

3 species.

***Aporus bicolor* Spinola, 1808**

Observations in the Algarve have shown the prey to be the trapdoor spider *Nemesia fagei* Frade & Bacelar, 1931. Because of its restricted distribution, other spiders must be the prey elsewhere in Portugal.

Widespread, common, 31 records.

WAHIS & DURAND 2012: Douro, Resende, 16-19.vii.1953, 1♂, *leg.* P.M.F. Verhoeff, coll. H. Wolf; Sagres, 18-19.vi.1993, 2♀, *leg.* E. Gros, coll. R. Wahis.

WOLF *et al.* 2009 (as *Aporus bicolor bicolor*): Aljezur, 1987; Sobreda, Lisboa, 1985; Cascais, 1968; Resende, Douro, 1968; Lagos, 1987; Estoril; Portimão, 1977; Milfontes, 1980; (as *Aporus bicolor hirtipennis* Saunders): Praia da Carvoeiro, 1983.

Trás-os-Montes, Douro Litoral, Estremadura, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

***Aporus planiceps* (Latreille, 1809)**

West-Mediterranean.

Central and Southern Portugal, scarce, 13 records. (Fig. 11).

DUSMET 1921: Lisboa, Setúbal, 1921, 1♀.  
Baixo Alentejo, Alcacer do Sal, 7.iv.2016, 1♂, *det.* Schmid-Egger, *leg.* Cross.  
Algarve, Amoreira, 28.vii.2015, field, *det.* & *leg.* Cross.  
Algarve, Barragem de Bravura, 24.vii.2016, 1♀; 27.vii.2015, 1♀, *det.* & *leg.* Cross.  
Algarve, Boca do Rio, 19.ix.2015, 1♂, *det.* & *leg.* Wood.  
Algarve, Boca do Rio, 19.x.2018, 1♂, 1♀, *det.* & *leg.* Cross.  
Algarve, Carrapateira, 14.ix.2014, 1♂, *det.* A. Livory/Wood, *leg.* A. Livory & R. Coulomb; 14.ix.2016, 1♂, *det.* & *leg.* Baldock.  
Algarve, Marmalete, 9.v.2016, 1♂, *det.* & *leg.* Wood.  
Algarve, Salema, 14.iv.2016, 1♀, *det.* & *leg.* Cross.  
Algarve, Salema, Praia da Figueira, 21.ix.2015, 2♂, 3♀, *det.* & *leg.* Wood; 14.iv.2016, 1♂; 12.v.2016, 1♂, *det.* & *leg.* Cross.

#### ***Aporus unicolor* Spinola, 1808**

Central and Southern Portugal, rare, 4 records.

DUSMET 1932: Mata de Leiria, 1921, 1♀.  
Estremadura, Santa Bárbara, 30.v.2009, 1♂, *det.* Schmid-Egger, *leg.* F. Pennycamp & P. Pereira.  
Beira Litoral, Fátima, 14.x.1972, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendonça.  
Algarve, Porto Covo, 24.ix.2014, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.  
Algarve, Silves, 22.vi.2014, 1♂, *det.* & *leg.* Baldock.

#### **Genus *Arachnospila* Kincaid, 1900**

10 species.

#### ***Arachnospila alpivaga* (Kohl, 1888)**

Widespread, rare, 2 records.

KUHLMANN 1996 (as *Arachnospila alpivaga difficilis* Haupt): Serra da Estrela, Penhas da Saúde 1500m, 23.vii.1990, 1♀, *det.* H. Wolf.  
WOLF *et al.* 2009 (as *Arachnospila alpivaga difficilis* Haupt): Amarante, 1990; Estoril, 1951; Tapada; Fafe, 1994; Mata do Fundão; Guarda, 1980; Resende, 1965; Sobreda, Lisboa, 1985; Massorra; Moimenta.  
Estremadura, Caldas da Rainha, Tornado, pan traps, 27.vii.2010, 1♂, *det.* Schmid-Egger, *leg.* R. Andrade.  
Algarve, Boca do Rio, 1.iv.2017, 1♂, *det.* Schmid-Egger, *leg.* Cross.

#### ***Arachnospila anceps* (Wesmael, 1851)**

Central and Northern Portugal, rare, 1 record.

WOLF *et al.* 2009 (as *Arachnospila anceps cyrna* Wolf): Setúbal, 1985; (as *Arachnospila anceps peninsulana* Wolf): Fafe, 1994; Resende; Maso.  
Minho, Braga, Vila do Gerês, 31.vii.2001, 1♂, *det.* & *leg.* Schmid-Egger.

#### ***Arachnospila esau* (Kohl, 1886)**

Central and Southern Portugal, scarce, 6 records.

WOLF *et al.* 2009: Sobreda, Lisboa, 1985; Guarda, 1980.  
Estremadura, Caparica, 9.iv.1992, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendonça.  
Algarve, Amoreira, 8.iv.2017, 1♂, *det.* & *leg.* Cross.  
Algarve, Cabo de São Vicente, 10.iv.2006, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Algarve, Carrapateira, 4.iv.2015, 1♂, *det.* Wahis, *leg.* Wood.  
Algarve, Sagres, 2.iv.2005, 2♂, 8.iv.2005, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

#### ***Arachnospila fausta* (Tournier, 1889)**

This species does not appear on the Fauna Europaea site. Wolf's citation may have been the first published record for Europe. Even he cited it as *fausta* aff.!, so he was not certain of the identity. Also found in North Africa and Spain (the latter, R. Wahis unpublished records).

Central and Southern Portugal, rare, 5 records.

WOLF *et al.* 2009: 1♀, Estremadura, Cabo Carvoeiro (as *fausta* aff.!).  
Baixo Alentejo, Vila Nova de Milfontes, 18.v.2012, 1♂, *det.* Wahis, *leg.* A. Livory & R. Coulomb.  
Algarve, Praia de Monte Clérigo, 12.x.2009, 1♀, *det.* Wahis, *leg.* Baldock.  
Algarve, Tavira, 1.vi.2011, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb; 28.v.2016, 4♀, *det.* & *leg.* A. Livory & R. Coulomb.  
Algarve, Vila Real de Santo António, 24.v.2012, 1♂, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

***Arachnospila holomelas* (Costa, 1882)**

Central and Southern Portugal, scarce, 9 records. (Fig. 12).

KUHLMANN 1996 (as *Arachnospila holomelas dissona* Wahis): Serra da Estrela, Nave de Santo António, 21.vii.1990, 1♀, det. H. Wolf.

WOLF et al. 2009 (as *Arachnospila gymnesiae* Dalle Torre): Cascais, 1973; Algarve, 1977; (as *Arachnospila holomelas*) Cape St. Vincent, 1985; Lagoa de Albufeira; Viseu; Quarteira, 1985; Guarda, 1980.

Algarve, Carrapateira, 4.x.2016, 1♂; 13.x.2016, 1♂, both det. & leg. Cross.

Algarve, Guia, 11.x.2009, 1♂, det. Wahis, leg. Baldock.

Algarve, Lagoa, 22.x.2015, 1♂, det. & leg. Baldock.

Algarve, Lagoa, Sesmarias, 20.ix.1996, 1♂, det. Wahis, leg. D. Keen.

Algarve, Lagos, 1.xi.2005, 1♀, det. Wahis, leg. Smit.

Algarve, Sagres, 12.iv.2006, 1♀, 1♂, det. Baldock, leg. M. & E. Howe.

Algarve, Salema, Boca do Rio, 12.x.2015, 1♂, det. & leg. Baldock.

***Arachnospila minutula* (Dahlbohm, 1842)**

Southern and Northern Portugal, rare.

WOLF et al. 2009 (as *Arachnospila minutula apenninusurata* Wolf): Resende, 1966; Praia da Rocha, Portimão, 1992.

***Arachnospila nuda* (Tournier, 1890)**

West-Mediterranean.

Widespread, rare.

WOLF et al. 2009: Cascais, 1960; Resende, 1966; Seixal, 1960; Sobreda, 1985; Monte Gordo, 1985; Amarante, 1990.

**\**Arachnospila rufa* (Haupt, 1927)**

Central Portugal, rare, 1 record.

Beira Baixa, Caramulo, 24.vii.2018, 1♀, det. Schmid-Egger, leg. M. & E. Howe.

Alto Alentejo, Montargil, 20.iv.1973, 1♀, det. Schmid-Egger, MNHNC, coll. Mendonça.

***Arachnospila silvana* (Kohl, 1886)**

Widespread, rare, 2 records.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, vii.1987, 1♀, det. H. Wolf.

WOLF et al. 2009: Coimbra; Estoril; Marresa; Évora, 1972; Sobreda, 1985; Fafe, 1994.

Baixo Alentejo, Vila Nova de Milfontes, 18-19.v.2012, 1♂, det. Wahis, leg. A. Livory & R. Coulomb

Algarve, Armação de Pêra, 5.v.2005, 1♀, det. Wahis, leg. Smit.

***Arachnospila sogdianoides* (Wolf, 1964)**

Central Portugal, rare.

WOLF et al. 2009: Serra da Estrela, 1975.

**Genus *Arachnotheutes* Haupt, 1927**

2 species.

***Arachnotheutes rufithorax* (Costa, 1882)**

Southern Portugal, rare.

WOLF et al. 2009: Olhão, 1987.

***Arachnotheutes turgidus* (Tournier, 1890)**

Southern Portugal, rare, 2 records.

WOLF et al. 2009: Algarve, Monte Gordo, 1985.

Algarve, Silves, 10.vi.2011, 1♂, det. Wahis, leg. Baldock.

Algarve, Silves, 19.vii.2014, 1♂, det. Wahis, leg. Baldock.

**Genus *Batozonellus* Arnold, 1937**

1 species.

***Batozonellus lacerticida* (Pallas, 1771)**

Central and Southern Portugal, scarce, 13 records. (Fig. 13)

DUSMET 1932: Évora (Mitra), 1921, 1♂.

Beira Litoral, Fátima, São Mamede, 17-20.vii.1974, 1♀, det. Schmid-Egger, MNHNC, coll. Mendonça

Beira Alta, Paços de Serra, 29.vii.1976, 1♀, det. Schmid-Egger, MNHNC, coll. Mendonça.

Estremadura, Setubal, Península de Troia, 1.viii.2016, 1♂, *det.* Baldock, *leg.* M. & E. Howe.  
Alto Alentejo, Montargil, Ponte de Sor, 18.viii.1973, 1♀; 15.viii.1976, 2♀; 10.vi.1979, 1♀, all *det.* Schmid-Egger, MNHNC, coll. Mendonça.  
Baixo Alentejo, Cercal, Janeirinha de Cima, 21.vii.2016, 27.vii.2016, 2♀, *det.* Baldock, *leg.* M. & E. Howe.  
Baixo Alentejo, Odemira, Ribeira de Torgal, 26.vii.2016, 1♂, *det.* Baldock, *leg.* M. & E. Howe.  
Algarve, Amoreira, 3.vi.2015, 1♂; 16.vi.2015, 23.v.2017; 8.vi.2017, field, all *det.* Cross.

### Genus *Dicyrtomellus* Gussakovskij, 1935

1 species.

#### *Dicyrtomellus tingitanus* (Wolf, 1966)

Widespread, scarce, 9 records.

KUHLMANN 1996 (as *Dicyrtomellus argenteus*): Serra da Estrela, Vale do Zêzere, viii.1987, 3♀; Cortes do Maio, 31.vii.1990, 1♀; Unhais, 30.vii.1990, 2♀, all *det.* H. Wolf.  
WOLF *et al.* 2009 (as *Dicyrtomellus argenteus* Wahis): Fafe, 1994; Estoril; Lagos, 1980.  
Beira Alta, Manteigas, Rota do Sol, 27.viii.2015, 1♀, *det.* & *leg.* A. Livory & R. Coulomb.  
Baixo Alentejo, Odemira, Parque das Águas, 26.vii.2016, 1♂, *det.* Baldock, *leg.* M. & E. Howe.  
Baixo Alentejo, Santo André, 1.viii.2018, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Baixo Alentejo, Vila Nova de Milfontes, 3.vii.1971, 1♀, *det.* Schmid-Egger, MNHNC, coll. Mendonça; 18-19.v.2012, 1♂, *det.* Baldock, *leg.* A. Livory & R. Coulomb.  
Algarve, Aljezur, Azenha nr. 29.ix.2014, 1♀, *det.* Baldock, *leg.* Cross.  
Algarve, Carrapateira, 14.ix.2016, 1♀, *det.* & *leg.* Cross.  
Algarve, Lagoa, Sesmarias, 20.v.1995, 1♂, *det.* Baldock, *leg.* D. Keen.  
Algarve, Pinheiro, 1.viii.2015, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.  
Algarve, Silves, 10.vi.2011, 1♂; 19.vii.2014, 1♂, both *det.* Wahis, *leg.* Baldock.

### Genus *Entomobora* Gistel, 1857

3 species.

#### *Entomobora crassitarsis* (Costa, 1887)

Widespread, scarce, 13 records.

KUHLMANN 1996 (as *Entomobora crassitarsis punica* Haupt): Serra da Estrela, Penhas da Saúde 1500m, vi.1989, 3♀, *det.* H. Wolf.  
WOLF *et al.* 2009 (as *Entomobora crassitarsis damryi* Tournier): Lagos, 1983; Carcavelos; Abrunhosa; Lisboa; Oliveira de Frades; Estoril; Faro, 2000; Portimão, 1978; Quarteira, 1985; Viseu.  
Trás-os-Montes, Serra do Montesinho, Alto do Figueirão, 30.vi.2016, 1♀, *det.* & *leg.* Wood.  
Beira Litoral, Fátima: 23.x.1972; 29.x.1972, 2♀, both *det.* Schmid-Egger, MNHNC, coll. Mendonça.  
Beira Alta, Manteigas, Poço do Inferno, 26.viii.2015, 1♀, *det.* & *leg.* A. Livory & R. Coulomb.  
Alto Alentejo, Mora, Cabeçao, 18.v.2016, 1♀, *det.* Baldock, *leg.* A. Albernaz Valente.  
Algarve, Armação de Pêra, 20.iv.2006, 1♂, *det.* Wahis, *leg.* Baldock.  
Algarve, Burgau, Barrancão, 1.iv.2017, 1♂; 2.iv.2017, 1♂; 7.iv.2017, 1♂; *det.* Cross/Schmid-Egger, *leg.* Cross.  
Algarve, Carrapateira, 3.iv.2015, 1♂, *det.* Wahis, *leg.* Wood.  
Algarve, Guia, 20.iv.2006, 1♂, *det.* Wahis, *leg.* Baldock.  
Algarve, Lagoa, Sesmarias, 17.v.1996, 1♀, *det.* Wahis, *leg.* D. Keen.  
Algarve, Salema, 16.xi.2015, 1♀, *det.* Schmid-Egger, *leg.* Cross.

#### *Entomobora fuscipennis* (Vander Linden, 1827)

Widespread, common, 43 records. (Fig. 14).

WOLF *et al.* 2009: Elvas, 1987; Praia da Carvoeiro, Algarve, 1983; Setúbal, 1972; Sobreda, Lisboa, 1985; Lagos, 1983, 1987; Sesimbra; Estoril; Seixal; Aljezur; 1987; Cascais, 1968; Coimbra, 1973; Armação de Pêra; Aljustrel; Alvor, 1987.  
Trás-os-Montes, Beira Litoral, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

#### *Entomobora operculata* (Klug, 1834)

Central & Southern Portugal, rare, 2 records.

WOLF *et al.* 2009: Estoril, 1948; Lagos, 1987; Barragem, Algarve; Grândola, 1994; Praia Sinora, Algarve; Silves, 1996.  
Algarve, Carrapateira, 13.v.1995, 1♀, *det.* & *leg.* Schmid-Egger.  
Algarve, Jordana, N. Moncarapacho, 8.ix.2015, 1♂, 1♀; *det.* Schmid-Egger, coll. Liebig.

**Genus *Eoferreola* Arnold, 1935**

3 species.

**\**Eoferreola anatolica* Priesner, 1973**

Southern Portugal, rare, 2 records.

Algarve, Carrapateira, 19.v.2018, 1♂; 23.v.2018, 1♀; both *det. & leg.* Cross.

***Eoferreola manticata* (Pallas, 1771)**

Widespread, scarce, 11 records. (Fig. 15).

KUHLMANN 1996: Serra da Estrela: Vale da Saúde 1500m, viii.1987, 1♀; Lagoa dos Cântaros 1500m, 28.vii.1990, 1♂, both *det.* H. Wolf.

**- form *lichtensteini* (Tournier, 1895)**

WAHIS & SCHMID-EGGER 2002: Estremadura, Peniche, 22.viii.1984, 1♀, P. van Ooijen; Algarve, Sagres 18.vi.1985, 1♀, E. Gros.

WOLF *et al.* 2009: Tróia, Lisboa.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 22.vi.2015, 1♀, *det.* Baldock, *leg.* A. Penado.

Algarve, Amoreira, 17.ix.2016, 1♂; 23.v.2017, 1♂; *det. & leg.* Cross.

Algarve, Budens, Monte da Sinceira, 25.ix.2016, 1♂, *det. & leg.* Cross.

Algarve, Carrapateira, 14.ix.2016, 2♀, *det. & leg.* Baldock; 14.ix.2016, 15.ix.2016, 30.ix.2016, 14.x.2016, 19.x.2016, 3.x.2017; 5♂, 1♀, *det. & leg.* Cross.

***Eoferreola rhombica* (Christ, 1791)**

Central Portugal, rare.

WOLF *et al.* 2009: Guarda, 1980.

**Genus *Episyron* Schioedte, 1837**

7 species.

***Episyron albonotatum* (Vander Linden, 1827)**

Northern Portugal, rare.

WOLF *et al.* 2009: Resende, Douro, 1966.

***Episyron arrogans* (Smith, 1873)**

Southern Portugal, rare.

WOLF *et al.* 2009: Monchique.

***Episyron candiotum* Wahis, 1966**

Central Portugal, rare.

WOLF *et al.* 2009: Setúbal, 1966.

***Episyron coccineipes* (Saunders, 1901)**

Central & Southern Portugal, rare, 1 record.

WOLF *et al.* 2009: Lagoa de Albufeira, 1964.

Baixo Alentejo, Santo André, 3.viii.2018, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

***Episyron funerarium* (Tournier, 1889)**

Widespread, scarce, 13 records.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, 1000m, viii.1987, 1♂, *det.* H. Wolf.

WOLF *et al.* 2009: (as *Episyron funerarium*): Coimbra; São João do Estoril; Guarda, 1983; (as *Episyron triste* Radoskowski) Aveiro, 1977; Sobreda, Lisboa, 1985.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 17.v.2014; 29.vi.2014; 7.viii.2014, 3♀; all *det.* Baldock, *leg.* A. Penado.

Beira Alta, Manteigas, Poço do Inferno, 26.viii.2015, 1♀, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

Estremadura, Nazaré, north beach, 18.viii.2015, 1♂, 1♀, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

Baixo Alentejo, Almogrove, 5.viii.2016, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Baixo Alentejo, Santo André, 7.viii.2018, 2♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Algarve, Amoreira, 2.iv.2015, 1♀, *det.* Baldock, *leg.* Cross.

Algarve, Budens, Boca do Rio, 23.xi.2015, 1♀, *det. & leg.* Cross.

Algarve, Carrapateira, 13.x.2016, 1♀, *det. & leg.* Cross.

Algarve, Guia, 11.x.2009, 1♀, *det.* Wahis, *leg.* Baldock.

Algarve, Odeceixe, 9.ix.2008, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

Algarve, Pêra dunes, 11.x.2009, 1♀, *det.* Wahis, *leg.* Baldock.

***Episyron gallicum* (Tournier, 1889)**

Widespread, rare, 1 record.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde, 1500m, 20-22.vii.1990, 2♀, det. H. Wolf.

WOLF et al. 2009: (as *Episyron gallicum gallicum*): Massorra; Resende, Douro; (as *Episyron gallicum intermedium* Haupt): Fafe, 1990.

Algarve, Monchique, Casa Moinho, 23.vii.2015, 1♀, det. Schmid-Egger, leg. M. & E. Howe.

***Episyron rufipes* (Linnaeus, 1758)**

Central and Southern Portugal, common, 20 records.

DUSMET 1932: Mitra, 1921, 1♂.

KUHLMANN 1996 (as *Episyron rufipes ephiates* Dalle Torre): Serra da Estrela, Penhas da Saúde, 1500m, 31.vii.1990, 1♀, det. H. Wolf.

WOLF et al. 2009 (as *Episyron rufipes ephiates*): Pegões; Cape Africa, Lisboa; Viana do Castelo; Lisboa, 1966; Milfontes, 1980; Mata de Leiria; (as *Episyron rufipes rufipes*): Cascais; Sines; Sobreda, Lisboa, 1985; Lagoa de Albufeira; São Martinho de Porto.

Beira Litoral, Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Evagetes* Lepeletier, 1845**

7 species.

***Evagetes dubius* (Vander Linden, 1827)**

Northern & Southern Portugal, rare, 1 record.

WOLF et al. 2009: Matosinhos, 1991; Fafe, 1994.

Baixo Alentejo, Mina de São Domingos, 3.v.2017, 1♀, det. & leg. Cross.

***Evagetes elongatus* (Lepeletier, 1845)**

Central and Northern Portugal, rare.

WOLF et al. 2009 (as *Evagetes elongatus elongatus*): Resende, Douro, 1966; Sobreda, Lisboa, 1985; Fafe, 1994; (as *Evagetes elongatus infernalis* Wolf): Lisboa; Estoril; Resende, Douro.

**\**Evagetes littoralis* (Wesmael, 1851)**

Southern Portugal, rare, 1 record.

Algarve, Aljezur, Praia de Amoreira, 2.v.2005, 1♀, det. Wahis, leg. Smit.

***Evagetes pectinipes* (Linnaeus, 1758) ssp. *trispinosus* (Kohl, 1886)**

West-Mediterranean subspecies. It is likely that ssp. *trispinosus* (Kohl) is a valid species. This taxon requires revision.

Widespread, rare, 5 records.

WOLF et al. 2009 (as *Evagetes pectinipes lusitanicus* Wolf): Pouca de Aguiar, 1967; Resende, Douro, 1967; Cascais.

Estoril; (as *Evagetes trispinosus*): Carvoeiro, Algarve, 1983; Sobreda, Lisboa, 1985; Milfontes, 1987.

Algarve, Boca do Rio, 22.ix.2016, 1♀, det. Schmid-Egger, leg. Cross.

Algarve, Carrapateira dunes, 2.v.2005, 1♀, det. Wahis, leg. Smit.

Algarve, Guia, 20.iv.2005, 1♀, det. Wahis, leg. Baldock.

Algarve, Lagoa, Sesmarias, 20.v.1995, 1♀, det. Wahis, leg. D. Keen.

***Evagetes siculus* (Lepeletier, 1845)**

Widespread, rare, 6 records.

WOLF et al. 2009 (as *Evagetes siculus aterrimus* Wolf): Braga; Matosinhos, 1991; Sobreda, Lisboa, 1985; (as *Evagetes siculus contemptus* Tournier): Estoril, 1982; Resende, Douro, 1951; Sintra, 1981; Quarteira, 1985; Fafe, 1994; Coimbra; São João de Estoril; (as *Evagetes siculus villicus* Tournier): Carcavelos; Estoril; Mata de Fundão; Sintra.

Douro Litoral, Amarante, Chapa, 10.ix.2016, 2♀, det. Schmid-Egger, leg. Cross.

Algarve, Carrapateira, 14.ix.2016, 1♀, det. & leg. Baldock; 17.xi.2015, 1♀, det. & leg. Cross; 20.ii.2017, 1♂, det. & leg. Cross.

Algarve, Lagoa, Sesmarias, 20.v.1995, 1♀, det. Wahis, leg. D. Keen.

Algarve, Monchique, 29.vii.2010, 1♀, det. & leg. A. Livory & R. Coulomb.

***Evagetes tumidosus* (Tournier, 1890)**

Widespread, rare, 5 records.

WOLF et al. 2009 (as *Evagetes tumidinus* Wolf): Murideira, 10.vii.1963, holotype; (as *Evagetes tumidosus*): Resende, Douro; Sobreda, Lisboa, 1985; Fafe, 1994; Estoril.

Beira Litoral, Fátima, 20.vii.1974, 1♀, det. Schmid-Egger, MNHNC, coll. Mendoça.

Baixo Alentejo, Santo André, Praia do Monte Velho, 2.viii.2018, 1♀, 5.viii.2018, 1♀, *det.* Schmid-Egger, *leg.* M. & E. Howe.

Algarve, Alvor dunes, 6.v.2005, 1♂, *det.* Wahis, *leg.* Smit.

Algarve, Odeceixe, 9.ix.2008, 1♀, *det.* Wahis, *leg.* A. Livory & R. Coulomb.

### Genus *Ferreola* Lepeletier, 1845

1 species.

#### \**Ferreola diffinis* (Lepeletier, 1845)

Southern Portugal, scarce, 7 records.

Beira Baixa, Freimoninho, Quinta da Melroa, 24.vii.2018, 1♀, *det.* Baldock, *leg.* M. & E. Howe.

Baixo Alentejo, Cercal, Janeirinha de Cima, 19.vii.2016, 30.vii.2016, 1♀, 1♂, *det.* Baldock, *leg.* M. & E. Howe.

Algarve, Amoreira, 7.viii.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Barragem de Bravura, 11.viii.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Monchique, 22.vii.2015, 1♀, 28.vii.2015, 1♂, *det.* Schmid-Egger, *leg.* M. & E. Howe.

### Genus *Homonotus* Dahlbom, 1843

The West Palaearctic species have been recently revised (SCHMID-EGGER 2018). The one Portuguese female is all-black and therefore belongs to *Homonotus niger* (Marquet), as, presumably, does all Portuguese material (the males cannot be recognised with certainty).

1 species.

#### *Homonotus niger* (Marquet, 1879)

Southern Portugal, rare, 2 records.

WOLF *et al.* 2009: 1♂, Alvor, 1987 (as *sanguinolentus* (Fabricius)).

Algarve, Aljezur, Praia de Amoreira, 2.v.2005, 1♂, *det.* & *leg.* Smit.

Algarve, Meia Praia, 2.v.2017, 1♀, *det.* & *leg.* Cross.

### Genus *Microphadnus* Cameron, 1904

1 species.

#### *Microphadnus pumilus* (Costa, 1882)

Widespread, scarce, 9 records. There is one prey record for Portugal: an immature ♀ *Evarcha* sp., Salticidae, 27.ix.2018.

WOLF *et al.* 2009: Aljustrel; Sobreda, Lisboa, 1985; Portimão.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 26-28.vii.2015, 1♀, *det.* Baldock, *leg.* A. Penado.

Alto Alentejo, Montemor-o-Novo, Foros de Vale de Figueira, 18.viii.2016, 4♂, 2♀, *det.* Cross, *leg.* A. Albernaz Valente.

Algarve, Barão do São João, 30.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Guia, 28.iv.2004, 1♂, *det.* Wahis, *leg.* Baldock.

Algarve, Odeceixe, 1.ix.2008, 1♀, *det.* Baldock, *leg.* A. Livory & R. Coulomb.

Algarve, Salema, Boca do Rio, 2.ix.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Salema, Praia da Figueira, 21.ix.2015, 1♀, *det.* Cross, *leg.* Wood.

Algarve, Salema, Praia da Figueira, 27.ix.2018, 1♀, *phot.* & *det.* Cross.

Algarve, Silves, 12.x.2010, 1♀, *det.* & *leg.* Baldock.

### Genus *Nanoclavelia* Priesner, 1955

1 species.

#### \**Nanoclavelia leucoptera* (Dahlbom, 1843)

Central and Southern Portugal, rare, 2 records.

Beira Litoral, Leiria, Alcobaça, Cela, 12.xi.2013, 1♀, *det.* Schmid-Egger, *leg.* R. Andrade

Algarve, Amoreira, 10.viii.2015, 1♀, *det.* Baldock, *leg.* Cross.

### Genus *Pompilus* Fabricius, 1798

1 species.

#### *Pompilus cinereus* (Fabricius, 1775)

Widespread, frequent, 29 records.

WOLF *et al.* 2009: (as *Pompilus cinereus cinereus*) Coimbra, 1981, 2008; Milfontes, 1980, 1987; Albufeira; Pegões; Azenhas do Mar; Cova do Vapôr; São Martinho; Tróia; Sobreda, Lisboa, 1985; Trafaria; Aveiro; Quarteira; Sines; Lisboa, 1967; Porto; Praia da Bordeira, 1966; Porto de Rei;

Setúbal, 1985; Almeida; (as *Pompilus cinereus lusitanicus* Wolf & Diniz): Cape Africa, 1952; Douro; Faro, 1974; Nazaré; Trafaria; Albufeira; Cova do Vapôr; Trafaria; Portimão, 1938. Douro Litoral, Beira Litoral, Estremadura, Baixo Alentejo, Algarve.

**Genus *Schistonyx* Saussure, 1887**

1 species.

***Schistonyx perezii* (Tournier, 1895) ssp. *hispanicus* Junco y Reyes, 1962**

West-Mediterranean; Iberian endemic subspecies.

Central and Southern Portugal, frequent, 28 records. (Fig. 16).

WOLF *et al.* 2009 (as *Schistonyx iberumberosus* Wolf & Diniz): Milfontes, 1987; Pegoes; Portimão; Odemira, 1966; Sines, 1956; Setúbal, 1985; Tróia; Cabo São Vicente, 1979; Cascais, 1988; Azenhas do Mar; Carcavelos; Evora; Mora; Lisboa, 1967. Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Tachyagetes* Haupt, 1930**

6 species.

***Tachyagetes aegypticus* Priesner, 1955**

Southern Portugal, rare.

WOLF *et al.* 2009: Milfontes, 1980.

**\**Tachyagetes affinis* Wolf, 1987**

West-Mediterranean.

Widespread, scarce, 13 records.

Trás-os-Montes, Bragança, Alfândega da Fé, 26.vi.2014, 1♀; 5.viii.2014, 1♀; 27.vi.2015, 1♀; 28.viii.2015, 1♀, all *det.* Schmid-Egger, *leg.* A. Penado.  
Beira Alta, Manteigas, 6.vi.2016, 1♀, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.  
Alto Alentejo, Montemor-o-Novo, Foros de Vale de Figueira, 18.viii.2016, 1♀; 22.viii.2016, 1♂, 1♀; *det.* Baldock, *leg.* A. Albermaz-Valente.  
Algarve, Amoreira, 24.x.2018, 1♀, *det.* & *leg.* Cross.  
Algarve, Carrapateira, 14.ix.2016, 1♀, *det.* & *leg.* Baldock.  
Algarve, Pêra, 18.ix.2015, 1♀, *det.* Schmid-Egger, *leg.* Wood.  
Algarve, Sagres, Martinal, 15.v.1995, 1♀, *det.* Wahis, *leg.* F. Gusenleitner.  
Algarve, Salema, Praia da Figueira, 22.ix.2015, 1♀, *det.* Schmid-Egger, *leg.* Wood.  
Algarve, Tavira, Cabanas, 31.v.2016, 1♀, *det.* Schmid-Egger, *leg.* A. Livory & R. Coulomb.

***Tachyagetes iberomaculatus* Wolf, 1975**

Central Portugal, rare.

WOLF *et al.* 2009: Lisboa, 1967.

***Tachyagetes immaculatus* Wolf, 1975**

Central and Northern Portugal, rare.

WOLF *et al.* 2009: Caparica, 1952; Resende, Douro, 1946.

***Tachyagetes leucocnemis* Haupt, 1930**

Widespread, rare, 4 records.

WOLF *et al.* 2009: Caparica, 1982, Olhão, 1987 (The latter as *Tachyagetes filicornis funebris* Priesner) Trás-os-Montes, Bragança, Alfândega da Fé, 29.vi, 7.viii, 11.viii.2014, 3♀; 27/28.vii, 27.viii.2015, 3♂, all *det.* Schmid-Egger, *leg.* A. Penado.

***Tachyagetes maculatus* Nouvel & Ribaut, 1959**

Central and Northern Portugal, rare, 1 record.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde 1500m, 29.vii.1990, 1♀, *det.* H. Wolf  
WOLF *et al.* 2009: Sobreda, Lisboa, 1985; Fafe, 1994.  
Beira Alta, Tarouca, Gouviães, 3.viii.2008, 1♀, *det.* Wahis, *leg.* P. L'Homme.

**Genus *Telostegus* Costa, 1887**

2 species.

***Telostegus delicatus* Haupt, 1930**

West-Mediterranean.

Central and Southern Portugal, scarce, 6 records.



WOLF et al. 2009: Seixal; Lagos; Monte Gordo, 1967; Portimão, 1967; Vale de Gaio. Baixo Alentejo, Santo André, Praia do Velho, 31.vii.2016, 1♀, det. Baldock, leg. M. & E. Howe. Algarve, Amoreira, 1.vi.2017, 1♀, det. Schmid-Egger, leg. Cross. Algarve, Carrapateira dunes, 2.v.2005, 1♀, det. Wahis, leg. Smit. Algarve, Odeceixe, 25.v.2011, 1♂, det. Baldock, leg. A. Livory & R. Coulomb. Algarve, Pêra dunes, 17.vii.2009, 2♀, det. Wahis, leg. Baldock. Algarve, Praia de Amoreira, 2.v.2005, 1♂, det. Wahis, leg. Smit.

***Telostegus inermis* (Brullé, 1832)**

Southern Portugal, rare, 1 record.

WOLF et al. 2009 (as *Telostegus inermis ater* Haupt): Monchique; Sines, 1966. Algarve, Vilarinha, 2.vi.2017, 1♀, det. Schmid-Egger, leg. Cross.

**Genus *Xenaporus* Ashmead, 1902**

1 species.

***Xenaporus schmidti* Priesner, 1967**

Southern Portugal, rare.

WOLF et al. 2009: Fuzeta, 1978.

**Uncertain Species**

**[*Anospilus ichnus* Wolf, 1962]**

This species does not exist.

WOLF et al. 2009: Castro Marim, 1985.

***Arachnospila algarvensis* Wahis nomen ineditum**

Due to uncertainty over the status of this species, *Arachnospila algarvensis* is not considered further here.

WOLF et al. 2009: Monte Clérigo, 1993.

***Auplopus ichnus* Wolf, 1960**

Central Portugal. A mis-identification, *Auplopus ichnus* is a Sardo-Corsican endemic.

WOLF et al. 2009: Coimbra, 1965.

**Genus *Pedinpompilus* Wolf, 1961**

***Pedinpompilus inops* (Haupt, 1933)**

Central Portugal. Wolf listed this determination as uncertain (aff!). *Pedinpompilus inops* is known only from Morocco, so if found in Portugal it would be a notable range extension. For now, this species is listed as uncertain.

WOLF et al. 2009: Sobreda, Lisboa, 1985.

## VESPIDAE

The taxonomy and nomenclature follow these sources:

- Eumeninae: VAN DER VECHT & FISCHER (1972); GUSENLEITNER (1994, 1998, 2013); the few deviations from these works are explained below, within the relevant species accounts.
- Masarinae: RICHARDS (1962, 1963); GUSENLEITNER (1997a);
- Polistinae: SCHMID-EGGER et al. (2017);
- Vespinae: ARCHER (2012).

102 species in 34 genera of the 162 species found in the Iberian Peninsula (CASTRO et al. 2008).

## EUMENINAE

Prey records from GEREYS (2016).

**Genus *Alastor* Lepeletier, 1841**

2 species. Prey: larvae of Coleoptera: Curculionidae.

***Alastor antigae* du Buysson in Dusmet, 1903**

Southern Portugal, rare, 1 record.

BLÜTHGEN 1956: Seixal, 30.v.1954, 1♀.

Algarve: Faro, Montenegro, 23.iv.2009, 1♀, phot. V. Jacinto (BV).

***Alastor atropos* Lepeletier, 1841**

Widespread, scarce, 13 records. (Fig. 17).

ANDRÉ 1881: "Portugal".

BLÜTHGEN, 1953A: Lisboa, 5.vi.1947, 1♂; Resende, 27.vi.1951, 1♀.

Trás-os-Montes, Bragança, Milhão, 19.vii.2006, 1♀, *det. & leg.* Castro.

Trás-os-Montes, Bragança, Montesinho, 29.vi.2016, 1♀, *det. & leg.* Wood.

Trás-os-Montes, Bragança, Rabal, 1 km S., 29.vi.2016, 3♂, 3♀, *det. & leg.* Wood.

Trás-os-Montes, Moimenta, hills E. of, 2.vii.2016, 2♂, *det. & leg.* Wood.

Douro Litoral, Amarante, Chapa, Linha do Tamega, 18.vi.2016, 19.vi.2016, 2♂, 1♀, *det. & leg.* Cross.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 2♀, 1♂, *det. & leg.* Castro.

Alto Alentejo, Évora, São Brás dos Matos, 25.v.2017, 2♀, *det. & leg.* Castro.

Alto Alentejo, Évora, São Miguel de Machede, 25.v.2017, 1♀, *det. & leg.* Castro.

Baixo Alentejo, Mértola, 2/4.vi.2016, 2♂, 1♀, *det. & leg.* A. Livory & R. Coulomb.

Algarve, Mexilhoeira Grande, 30.iv.2005, 1♂, *det. & leg.* Smit.

Algarve, Sesmarias, Lagoa, 11.vi.2002, 1♀, *det.* Castro, *leg.* D. Keen.

Algarve, Tavira, Cabanas, 31.v.2016, 1♀, *det. & leg.* A. Livory & R. Coulomb.

**Genus *Alastorynerus* Blüthgen, 1938**

1 species.

***Alastorynerus perezii* (Berland, 1927)**

Northern Portugal, rare, 1 record.

GUSENLEITNER 1997B: (as *Microdynerus (Alastorynerus) perezii*) Trás-os-Montes, Peso da Régua, 8.v.1990, *leg.* F. Gusenleitner.

Trás-os-Montes, 3km NE of Vargos, 3.vii.2016, 1♀, *det. & leg.* Wood.

**Genus *Allodynerus* Blüthgen, 1938**

4 species. Prey: larvae of Lepidoptera.

***Allodynerus delphinalis* (Giraud, 1866)**

Widespread. scarce, 7 records.

BLÜTHGEN, 1953B: Aljezur.

BLÜTHGEN, 1956: Vale de Gaio, 24.vi.1947, 1♀.

Trás-os-Montes, Reconco, 3.vii.2016, 1♀, *det.* Castro, *leg.* Wood.

Beira Litoral, Coimbra, Figueira de Foz, 22.vii.2017, 1♂, *det.* Baldock, *leg.* S. Ferreira.

Estremadura, Peniche, 22.viii.2015, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Ribatejo, Santarem, Torres Novas, 31.viii.2013, 1♂, *det.* Castro, *leg.* A. Goncalves.

Algarve, Carrapateira, 4.x.2016, 1♂, *det.* Castro, *leg.* Cross.

Algarve, Monchique, 22.vii.2015, 1♀, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Tavira, 30.vii.2015, 1♀, *det.* Castro, *leg.* M. & E. Howe.

***Allodynerus floricola* (Saussure, 1853)**

Central & Southern Portugal, rare.

DUSMET 1931: (as *Odynerus*) Évora, (Mitra) 1921, 1♂.

BLÜTHGEN 1956: Caparica, 12.vi.1952, 1♂.

***Allodynerus koenigi* (Dusmet, 1917)**

Central & Southern Portugal, rare, 2 records.

CASTRO & DVOŘÁK 2010: Guardia, Seixo Amarelo, 31.vii.1996, 1♂, *det.* Castro, *leg.* J. García

Algarve, Aljezur, W of Vale da Telha, 1-9.v.2016, 1♂, *det.* Castro, *leg.* Wood.

Algarve, Vale da Telha, 16.v.2018, 1♂, *det.* Castro, *leg.* Cross.

**\**Allodynerus rossii* (Lepeletier, 1841)**

Northern & Southern Portugal, rare, 3 records.

Douro Litoral, Amarante, Chapa, Linha do Tamega, 19.vi.2016, 1♀, *det.* Castro, *leg.* Cross.

Algarve, Monchique, 26.vii.2015, 1♀, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Pedralva, 15.iv.2017, 1♂, *det.* Castro, *leg.* Cross.

**Genus *Ancistrocerus* Wesmael, 1836**

9 species. Prey: larvae of Lepidoptera, Hymenoptera and Coleoptera.

**[*Ancistrocerus auctus* (Fabricius, 1793)]**

(All the Portuguese *Ancistrocerus auctus* records published so far, date back to a time when the taxon was considered conspecific with *A. renimacula*. The presence in Portugal of *A. auctus* has not been proved by post-1999 material, and so for the moment pre-1999 records have to be discarded or at best provisionally attributed to *A. renimacula*, which has been reliably recorded from the country. See below, under *A. renimacula*.)

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde, 20.vii.1990, 1♀, *det.* J. Gusenleitner.

***Ancistrocerus biphaleratus* (Saussure, 1852) ssp. *triphaleratus* (Saussure, 1855)**

Widespread, common, 47 records. Despite records from the northern and central regions the vast majority of records are from the Algarve. (Fig. 18).

BLÜTHGEN 1953A: Cascais, 2♀ 2♂; Lisboa, 1♂; Trafaria, 26.v.1950, 1♀; Vale de Gaio, 7.ix.1947, 1♀.  
BLÜTHGEN 1956: Azenhas do Mar, 4.x.1953, 1♀ 1♂; 29.viii.1954, 1♂; Lagoa de Albufeira, 21.vi.1953, 2♂.

DINIZ 1978: Armação de Pêra, Pêra.

Minho, Estremadura, Baixo Alentejo, Algarve.

***Ancistrocerus claripennis* Thomson, 1874**

Northern & Central Portugal, scarce, 7 records.

DINIZ 1978: Resende, 1♀.

Douro Litoral, Amarante, Chapa, 12.vi.2016, 18.vi.2016, 2♂, *det.* Castro, *leg.* Cross.

Beira Baixa, Castelo Branco, Monsanto, 25.iv.2017, 1♀, 2♂, *det.* & *leg.* Castro.

Beira Baixa, Guarda, Escalhão, 28.iv.2017, 2♂, *det.* & *leg.* Castro.

Beira Baixa, Freimoninho, 23.vii.2018, 26.vii.2018, 29.vii.2018, 2♂, 1♀, *det.* Castro, *leg.* M. & E. Howe.

***Ancistrocerus dusmetiolus* (Strand, 1914)**

Northern Portugal, rare.

BLÜTHGEN 1953A: Ordins, 3♂ (Douro Litoral).

***Ancistrocerus gazella* (Panzer, 1798)**

Widespread, common, 32 records.

BLÜTHGEN 1953A: Abrunhosa, Areeiro, Cascais, Estoril, Lisboa, Resende.

DINIZ 1959: Aljustrel, Parede.

DINIZ 1978: Azenhas do Mar, Carcavelos, Coimbra, Évora, Lagoa de Albufeira, Mata do Fundão, Porto, Serra de Sintra, Serra de Monchique, Setúbal, Tabuaço, Vila Real de Santo António, Viseu, Vouzela.

Douro Litoral, Beira Litoral, Ribatejo, Estremadura, Baixo Alentejo, Algarve.

***Ancistrocerus longispinosus* (Saussure, 1855)**

Widespread, frequent, 17 records.

BLÜTHGEN 1952: (as *A. gazelloides* Guiglia ssp. *mediterraneus* Blüthgen) Resende, 3♀ 2♂; Lisboa, 1♂; Massorra, 2♂.

BLÜTHGEN 1956: (as *A. gazelloides mediterraneus*) Aljustrel, Estoril, Lagoa de Albufeira, Seixal.

DINIZ 1959: (as *A. gazelloides* Guiglia) Quinta do Mato.

DINIZ 1978: Cardigos, Coimbra, Miranda do Corvo, Monchique, Nazaré, Santo Tirso, Sines, Trafaria, Vouzela.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, viii.1987, 1♂; Torre, 4.viii.1990, 2♀; Lagoa dos Cântaros, 28.vii.1990, 4♂, [*det.* J. Gusenleitner].

Trás-os-Montes, Beira Litoral, Beira Alta, Beira Baixa, Alto Alentejo, Algarve.

***Ancistrocerus oviventris* (Wesmael, 1836)**

Central & Southern Portugal, rare, 2 records.

BLÜTHGEN 1953A: Vale de Gaio, 7.ix.1947, 1♀.

BLÜTHGEN 1956: Cascais, 27.iv.1952, 1♀; Sesimbra, 3.v.1951, 1♀.

DINIZ 1978: Miranda do Corvo, Portimão, Serra de Monchique, Soalheira.

Beira Litoral, São Pedro de Moel, 17.iv.1997, 1♂, *det.* Castro, *leg.* M. Jenner.

Algarve, Monchique, Monte Picota 750m, 3.v.2005, 1♂, 1♀, *det.* & *leg.* Smit.

***Ancistrocerus parietinus* (Linnaeus, 1761)**

Central & Southern Portugal, rare, 1 record.

DUSMET 1921: (as *Odynerus*) Buçaco, 1921, 2♂, 2♀.

Estremadura, Cabo Espichel, 4.vi.2011, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

**[*Ancistrocerus parietum* (Linnaeus, 1758)]**

Given what is known about the Iberian distribution of *A. parietum*, at least some of Diniz's material is likely to belong to other species. Since there is no recently determined material of this species its presence is unconfirmed.

DINIZ 1959: many localities.

***Ancistrocerus reconditus* Gusenleitner, 1983**

Central Portugal, rare, 3 records.

Estremadura, Cabo Espichel, 4.vi.2011, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Estremadura, Setúbal, Caparica, 20.vi.1971, 1♀, *det.* Castro, *leg.* A. Mendonça. MNHNC, coll. Mendonça.

Baixo Alentejo, Santo André, 20.vii.2016, 1♀, *det.* Castro, *leg.* M. & E. Howe.

***Ancistrocerus renimacula* (Lepeletier, 1841)**

Widespread, frequent, 27 records.

SAUNDERS 1881: (as *Odynerus*) Ponte de Morcellos (= Ponte da Mucela?), 14.vi.1880, 1♀, *leg.* A. Eaton.

BLÜTHGEN 1953A: Estoril, 2♀ 1♂; Lisboa, 1♀ 2♂; Resende, 1♂; S. João do Estoril, 1♂.

BLÜTHGEN 1956: Porto, 14.vii.1954, 1♀; Seixal, 30.v.1954, 1♀.

KUHLMANN 1996: (as *Ancistrocerus auctus* (Fabricius, 1793)) Serra da Estrela, Penhas da Saúde, 20.vii.1990, 1♀, *det.* J. Gusenleitner.

(It is impossible to know if the material mentioned in the above papers actually belonged to *A. renimacula*, to *A. auctus* or to both; the two taxa began to be treated as independent species only very recently (GUSENLEITNER, 1999). All new records have been attributed to *A. renimacula*, the only taxon which has been reliably identified from Portugal.)

Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Algarve.

**Genus *Antepipona* Saussure, 1855**

3 species. Prey: larvae of Lepidoptera.

***Antepipona deflenda* (Saunders, 1853)**

Central & Southern Portugal, common, 39 records.

BLÜTHGEN 1953A: (as *Odontodynerus deflendus* (Saunders)) Estoril, Lisboa, Portimão, Porto de Rei, Resende, Trafaria, Vale de Gaió.

BLÜTHGEN 1956: (as *Odontodynerus deflendus* (Saunders)) Aljustrel, Caparica, Évora, Seixal.

DINIZ 1978: Amarante, Carcavelos, Castelo Branco, Coimbra, Lagoa de Albufeira, Lisboa, Mata do Fundão, Nazaré, Oeiras, Sines.

Beira Baixa, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

***Antepipona doursii* (Saussure, 1855)**

Northern & Central Portugal, scarce, 6 records.

DUSMET 1921: (as *Odynerus matritensis* Dusmet, 1903) Estremoz, 1921, 2♀.

Trás-os-Montes, Bragança, Alfândega da Fé, pans, 18.v.2014, 1♀, *det.* Castro, *leg.* A. Penado.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 1♀, *det.* & *leg.* Castro.

Alto Alentejo, Évora, São Brás dos Matos, 25.v.2017, 3♀, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, Castelo de Vide, 26.v.2017, 1♀, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, Terrugem, 24.v.2017, 1♀, 1♂, *det.* & *leg.* Castro.

Baixo Alentejo, A-do-Neves (8 km NNW. of Almodôvar), 29.v.2009, 3♀, *det.* Castro, *leg.* V. Mauss.

***Antepipona orbitalis* (Herrich-Schaeffer, 1839)**

Central & Southern Portugal, rare, 2 records.

BLÜTHGEN 1953A: (as *Odontodynerus*) Resende, 2.ix.1946, 1♀.

DINIZ 1978: Santo Tirso.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 1♀, *det.* & *leg.* Castro.

Algarve: Moncaparacho, Olhão, 26.v.2012, 1♀, *phot.* V. Jacinto (BV).

**Genus *Cephalochilus* Blüthgen, 1939**

1 species.

***Cephalochilus labiatus* (Fabricius, 1798) ssp. *hispanicus* (Medina, 1892)**

Central & Southern Portugal, rare, 4 records.

DINIZ 1978: Algarve, Vila Real de Santo António.

Estremadura, Sintra, Belas, 12.viii.2018, 1♂, *phot.* P. Carvalho, *det.* Cross.

Baixo Alentejo, Melides, 27.vii.2016, 1♂, 3♀, *det.* Cross/Howe, *leg.* M. & E. Howe.

Algarve, Pêra, Praia Grande, 29.vi.2015, 1♂; 30.vi.2015, 1♂, *det.* Cross/Castro, *leg.* Cross.

**Genus *Delta* Saussure, 1855**

1 species. Prey: larvae of Lepidoptera, especially Geometridae.

***Delta unguiculatum* (Villers, 1789)**

Widespread, frequent, 20 records. (Fig. 19).

ANDRÉ 1881: (as *Eumenes unguiculus* Villiers) "Portugal".

DUSMET 1931: (as *Eumenes unguiculus* Vill.) Sintra, 1♀.

BLÜTHGEN 1956: Monchique, 23-30.vii.1938, 2♂.

DINIZ 1959: (as *Eumenes unguiculatus* Vill.) Mitra; Montemuro.

DINIZ 1978: Coruche, Mata do Fundão, Montemor-o-Velho, Rio Frio, Salir, Serra do Buçaco, Serra de Monchique.

Trás-os-Montes, Alto Alentejo, Algarve.

**Genus *Eumenes* Latreille, 1802**

9 species. Prey: larvae of Lepidoptera.

***Eumenes coarctatus* (Linnaeus, 1758)**

**- subsp. *coarctatus* (Linnaeus, 1758)**

Widespread, common, 59 records.

BLÜTHGEN 1943: (as *E. pomiformis* ssp. *barbatulus* Blüthgen, 1943) Pombal, 1♀.

BLÜTHGEN 1956: (as *E. pomiformis barbatulus* Blüthgen, 1943) Algarve, without any concrete locality; Monchique.

DINIZ 1978: Águeda, Aljustrel, Amarante, Braga, Cabo Mondego, Coimbra, Évora, Lagoa de Albufeira, Lisboa, Mata do Fundão, Miranda do Corvo, Oliveira de Frades, Portimão, Resende, Santo Tirso, Serra do Buçaco, Serra do Gerês, Serra de Lousã, Seixal, Sines, Souto, Tabuaço, Viseu.

KUHLMANN 1996: Serra da Estrela, 1990.

Trás-os-Montes, Beira Litoral, Beira Alta, Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

**- subsp. *maroccanus* Gusenleitner, 1972**

Subspecies *maroccanus* has been disputed by CASTRO (1997) and GEREYS (2012), both of whom consider it a synonym of the nominotypical form.

Southern Portugal, rare, 1 record.

Algarve, Pêra dunes, 17.vii.2009, 1♂, 1♀, *det.* Gusenleitner, *leg.* Baldock.

**\**Eumenes coronatus* (Panzer, 1799)**

Central & Southern Portugal, scarce, 10 records.

Beira Litoral, Fátima, 15.ix.1972, 1♀, *det.* Castro. MNHNC, coll. Mendoca.

Beira Alta, Manteigas, Poço do Inferno, 26.viii.2015, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Beira Alta, Manteigas, Rota do Sol, 27.viii.2015, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Beira Alta, Manteigas, Vale do Zêzere, 25.viii.2015, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Beira Baixa, Guarda, Manteigas, 7.ix.2017, 1♂, *det.* & *leg.* Castro.

Baixo Alentejo, Ribeira do Torgal, 26.vii.2016, 1♂, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Barragem da Bravura, 24.vii.2015, 1♂, *det.* Castro, *leg.* Cross.

Algarve, Boca do Rio, 20.ix.2016, 1♂, *det.* Castro, *leg.* Cross.

Algarve, Faro, Bordeira, 20.ix.2010, 1♀, *det.* Józsan/Castro, *leg.* H. Whiteley.

Algarve, Monchique, 23.vii.2015, 1♀, *det.* Castro, *leg.* M. & E. Howe.

***Eumenes dubius* Saussure, 1852**

Widespread, common, 45 records.

DINIZ 1978: Aljustrel, Azenhas do Mar, Carcavelos, Coimbra, Évora, Góis, Lisboa, Marinha Grande, Portimão, Resende, Serra de Sintra, Soalheira, Valença do Minho, Viseu.

Minho, Beira Alta, Beira Baixa, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

***Eumenes mediterraneus* Kriechbaumer, 1879**

Central & Southern Portugal, frequent, 32 records. (Fig. 20).

ANDRÉ 1881: "Portugal" (no localities mentioned).

DINIZ 1959: (as *E. coarctatus* L. var. *mediterranea* Kriech.) Buçaco; Lousã; Mata de Mira; Serra da Boa Viagem.

DINIZ 1978: (as *E. mediterraneus opacus* Gusenleitner, 1972) Abrunhosa, Aljustrel, Coimbra, Lisboa, Miranda do Corvo, Portimão, Vila Real de Santo António, Viseu.

Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

***Eumenes papillarius* (Christ, 1791)**

Widespread, scarce, 13 records.

DINIZ 1978: (as *E. papillarius monticola* Blüthgen, 1956) Estoril, Soalheira.  
Douro Litoral, Chapa, 9.ix.2016, 1♂, *det.* Castro, *leg.* Cross.  
Beira Litoral, Coimbra, Mira, 22.viii.2015, 1♂; Praia de Mira, 22.viii.2015, 1♂, both *det.* & *leg.* Castro.  
Beira Baixa, Castelo Branco, Ladoeiro, 4.ix.2017, 2♂, *det.* & *leg.* Castro.  
Estremadura, Arrábida, 30.vii.1979, 1♀, *det.* Castro, *leg.* & coll. A. Serrano, MNHNC.  
Ribatejo, Torres Novas, Casal de Juge, 30.iv.2014, 1♂, *det.* Castro, *leg.* M. Jenner.  
Alto Alentejo, Portalegre, Castelo de Vide, 26.v.2017, 1♂, *det.* & *leg.* Castro.  
Baixo Alentejo, Cercal, Janeirinha de Cima, 19.vii.2016, 1♂, *det.* Castro, *leg.* M. & E. Howe.  
Baixo Alentejo, Ribeira do Torgal, 26.vii.2016, 1♂, *det.* Castro, *leg.* M. & E. Howe.  
Algarve, Azinhal (Castro Marim), 2.v.2008, 1♀, phot. V. Jacinto (BV).  
Algarve, Faro, Bordeira, 20.ix.2010, 1♂, *det.* Castro, *leg.* H. Whiteley.  
Algarve, Monchique, 10.ix.2008, 2♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.  
Algarve, Monchique, 22.vii.2015, 1♂, *det.* Castro, *leg.* M. & E. Howe.  
Algarve, Praia da Figueira, 26.ix.2018, 1♂, *det.* & *leg.* Cross.  
Algarve, Silves, 12.x.2010, 1♂, *det.* Castro, *leg.* Baldock.

***Eumenes pedunculatus* (Panzer, 1799)**

Central Portugal, rare.

DINIZ, 1978: Carcavelos, Montemor-o-Velho (Estremadura).

***Eumenes pomiformis* (Fabricius, 1781)**

Widespread, frequent, 17 records.

DINIZ 1959: Buçaco; Mata de Leiria; Mitra; Mogofores; Monchique.  
Trás-os-Montes, Beira Alta, Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

**\**Eumenes punctaticlypeus* Giordani Soika, 1943**

Central Portugal, rare, 1 record.

Beira Litoral, Fátima, 25.vii.1974, 1♀, *det.* Castro, *leg.* P. Mendonça, MNHNC, coll. Mendonça.

***Eumenes subpomiformis* Blüthgen, 1938**

Widespread, frequent, 18 records.

BLÜTHGEN 1953A: Porto de Rei, 7.ix.1948, 1♂.  
BLÜTHGEN 1956: Resende, 28.viii.1951, 1♀.  
BLÜTHGEN 1961: Abrunhosa, 28.x.1949, 1♂.  
DINIZ 1978: Armação de Pêra, Castelo Branco, Coimbra, Penela, Santo Tirso, Serra da Lousã, Soure, Tabuaço, Vouzela.  
Trás-os-Montes, Douro Litoral, Beira Alta, Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Algarve.

**Genus *Eumicrodynerus* Gusenleitner, 1972**

Described as a subgenus of *Microdynerus*, the taxon was raised to generic rank by GUSENLEITNER (1976).  
1 species.

***Eumicrodynerus longicarpus* Gusenleitner, 1976**

Previously known only from Spain.

Central & Southern Portugal, rare, 5 records.

CASTRO & DVOŘÁK 2010: Faro, Azinhal, 17.v.2009, 1♀, phot. V. Jacinto (BV).  
Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 1♀, *det.* & *leg.* Castro.  
Alto Alentejo, Évora, Juromenha, 25.v.2017, 1♀, *det.* & *leg.* Castro.  
Alto Alentejo, Évora, São Brás dos Matos, 25.v.2017, 2♀, *det.* & *leg.* Castro.  
Alto Alentejo, Portalegre, Terrugem, 24.v.2017, 2♀, 2♂, *det.* & *leg.* Castro.  
Algarve, Fonte de Sta. Catarina do Bispo, 4.v.2005, 1♀, *det.* & *leg.* Smit.

**Genus *Euodynerus* Dalla Torre, 1904**

6 species. Prey: larvae of Lepidoptera.

***Euodynerus bidentiformis* (Giordani Soika, 1942)**

In the Iberian context, this species was previously known as *E. bidentoides* (Giordani Soika, 1953), which has recently been synonymised (GUSENLEITNER, 2013) under *E. bidentiformis*.

Widespread, rare, 4 records.

SAUNDERS 1881: (as *Odynerus (Leionotus) simplex* F.) between S. Barnabé and S. Bartolomeu de Messines, 13.v.1880, 1♂. (It is unknown if Saunders meant *E. bidentiformis*, but this is a more likely option than *E. posticus*, since Saunders spoke of “*simplex*” and *E. bidentiformis* is very similar to *E. quadrifasciatus simplex*).

BLÜTHGEN 1956: (as *Euodynerus bidentoides* (Giordani Soika, 1953)) Corroios, 2.iv.1953, 1♀.

DINIZ 1978: (as *E. quadrifasciatus* (Fabricius, 1793)) Miranda do Corvo (Beira Litoral).

Trás-os-Montes, Reconco, 3.vii.2016, 1♂, 1♀, *det.* Castro, *leg.* Wood.

Trás-os-Montes, Serra do Montesinho, Porto do Sabor, 4.vii.2016, 1♂, *det.* Castro, *leg.* Wood.

Algarve, Aljezur, W of Vale de Telha, 1-9.v.2016, 3♂, 2♀, *det.* Castro, *leg.* Wood.

Algarve, Amoreira, 24.iv.2016, 1♀, *det.* Castro, *leg.* Cross.

#### ***Euodynerus curictensis* Blüthgen, 1940**

Northern & Central Portugal, scarce, 6 records.

BLÜTHGEN 1956: Resende, 15.vii.1953, 1♀.

DINIZ 1978: Montemor-o-Velho.

KUHLMANN 1996: Serra da Estrela, Vale da Candieira, 2.viii.1990, 1♀, (*det.* J. Gusenleitner).

Minho, Codeçoso, Linha do Tamega, 13.vi.2017, 1♂, *det.* Cross/Castro, *leg.* Cross.

Trás-os-Montes, Montesinho, 29.vi.2016, 1♂, *det.* Castro, *leg.* Wood.

Trás-os-Montes, Montesinho, Alto do Figueirão, 30.vi.2016, 3♂, *det.* Castro, *leg.* Wood.

Trás-os-Montes, Vargos, 3 km NE, 3.vii.2016, 1♂, *det.* Castro, *leg.* Wood.

Beira Baixa, Castelo Branco, Monsanto, 27.v.2017, 1♂, *det.* & *leg.* Castro.

Beira Baixa, Caramulinho, 27.vii.2018, 1♂, 1♀, *det.* Cross, *leg.* M. & E. Howe.

#### ***Euodynerus dantici* (Rossi, 1790)**

Widespread, scarce, 10 records.

DUSMET 1931: (as *Odynerus*) Soure, 1♂.

It is unknown if this is actually *E. dantici*, *E. curictensis* or even *E. fastidiosus*, three very similar-looking taxa; the widespread *E. curictensis* had not been described in 1931, and Dusmet considered *E. fastidiosus* a synonym of *E. dantici*.

BLÜTHGEN 1953A: Cascais, 8.vi.1950, 1♀ 5♂; Estoril, 7.viii.1943, 1♀; 13.vii.1947, 1♂; Lisboa, 2♂; S. João do Estoril, 15.iv.1948, 1♂; Seixal, 1♂.

BLÜTHGEN 1956: (as *E. dantici iberogallicus* Blüthgen, 1942) Aljustrel, 20-21.vi.1952, 1♀ 1♂; Resende, 16.vii.1953, 1♂; Trafaria, 1.vii.1951, 5♂.

DINIZ 1959: Aldeia Nova de S. Bento, Soure.

DINIZ 1978: Serra da Gardunha, Soalheira, Vila Velha do Ródão.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, viii.1987, 1♂, (*det.* J. Gusenleitner).

Douro Litoral, Amarante, Chapa, Linha do Tamega, 18.vi.2016, 1♂, *det.* Castro, *leg.* Cross.

Estremadura, Lisboa, Quinta Conde Arcos, 26.vi.2018, 1♂, *det.* Castro, *leg.* M. Azevedo.

Estremadura, Nazaré, dunes sud, 19.viii.2015, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Alto Alentejo, Évora, Estremoz, 25.v.2017, 1♂, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, Porto da Espada, 26.v.2017, 1♀, *det.* & *leg.* Castro.

Baixo Alentejo, Mértola, 2.vi.2016, 1♀, *det.* Livory, Castro, *leg.* A. Livory & R. Coulomb.

Algarve, Burgau, 29.iv.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Portimão, 22.v.2009, 1 specimen (sex not discernible), phot. V. Jacinto (BV).

Algarve, Praia do Vale da Lama, 29.v.2018, 1♀, *det.* & *leg.* Cross.

Algarve, Quinta da Rocha, 2.v.2017, 1♂, *det.* & *leg.* Cross.

#### **\**Euodynerus fastidiosus* (Saussure, 1853)**

Southern Portugal, rare, 1 record.

Algarve, Burgau, 27.vi.2018, 1♀, *det.* & *leg.* Cross.

#### ***Euodynerus posticus* (Herrich-Schaeffer, 1841)**

Central & Southern Portugal, scarce, 9 records.

BLÜTHGEN 1953A: Resende, 2.x.1946, 1♂; 24.viii.1951, 1♀.

BLÜTHGEN 1956: Lisboa, 8.viii.1946, 1♂. DINIZ 1978: Coimbra, Serra do Gerês, Soalheira.

Beira Litoral, Cascalheira, 1.viii.2018, 1♀, *det.* Cross, *leg.* M. & E. Howe.

Beira Baixa, Castelo Branco, Monsanto, 27.v.2017, 1♂, *det.* & *leg.* Castro.

Beira Baixa, Freimoninho, 23.vii.2018, 3♂, 27.vii.2018, 1♀, *det.* Cross/Castro, *leg.* M. & E. Howe.

Alto Alentejo, Évora, Montemor-o-novo, 30.viii.2016, 1♀, *det.* Cross *leg.* A. Albernez Valente.

Alto Alentejo, Portalegre, Castelo de Vide, 26.v.2017, 1♂, *det.* & *leg.* Castro.

Alto Alentejo, Portalegre, São Simão, 7.vii.2017, 1♂, *det.* & *leg.* Castro.

Algarve, Lagos, 2.vi.1987, 1♂, *leg.* H. Tussac, *det.* & coll. Castro.

Algarve, Monchique, 22.vii.2015, 1♂, *det.* Castro, *leg.* M. & E. Howe.

***Euodynerus variegatus* (Fabricius, 1793)**

Widespread, common, 41 records. (Fig. 21).

ANDRÉ 1881: (as *Odynerus crenatus* Lepeletier) “Portugal”.

DUSMET 1931: (as *Odynerus crenatus* Lep.) Mitra, 1♂.

BLÜTHGEN 1953A: (as *E. crenatus* (Lep.)) Cascais, Cova do Vapor, Estoril, Lisboa, Monchique, Portimão, Trafaria.

BLÜTHGEN 1956: (as *E. crenatus crenatus* (Lepeletier, 1841)) Aljustrel, Évora, Pinhal Novo.

DINIZ 1978: Monte Gordo, Seixal, Soalheira, Tabuaço, Vila Real de Santo António.

Trás-os-Montes, Beira Litoral, Beira Baixa, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Eustenancistrocerus* Blüthgen, 1938**

2 species. Prey: larvae of Lepidoptera.

***Eustenancistrocerus amadanensis* (Saussure, 1855)**

Central & Southern Portugal, frequent, 17 records.

BLÜTHGEN 1953A: (as *Parastenancistrocerus transitorius* (F. Morawitz, 1867)) Estoril, 5.viii.1946, 1♀; Vale de Gaio, 17.viii.1947, 2♀.

BLÜTHGEN 1956: (as *Parastenancistrocerus transitorius* (F. Morawitz, 1867)) Aljustrel, Évora.

DINIZ 1978: (as *E. transitorius*) Monte Gordo.

Beira Litoral, Beira Baixa, Alto Alentejo, Baixo Alentejo, Algarve.

***Eustenancistrocerus blanchardianus* (Saussure, 1855)**

Northern & Central Portugal, rare.

DUSMET 1921: (as *Odynerus*) Estremoz, 1921, 1♂, 2♀.

DUSMET 1931: (as *Odynerus*) Soure; Mitra; Herdade da Mitra.

BLÜTHGEN 1956: (as *Parastenancistrocerus*) Aljustrel, 21.vi.1952, 1♀.

DINIZ 1959: (as *Parastenancistrocerus*) Coimbra; Serra da Boa Viagem.

DINIZ 1978: Caparica, Portalegre.

**Genus *Gymnomerus* Blüthgen, 1938**

1 species. Prey: larvae of Coleoptera: Curculionidae of genus *Phytonomus*.

**\**Gymnomerus laevipes* (Shuckard, 1837)**

Central & Southern Portugal, scarce, 12 records.

Beira Baixa, Castelo Branco, Toulões, 27.iv.2017, 1♀, 1♂, *det. & leg.* Castro.

Ribatejo, PN das Serras de Aire e Candeeiros, S of Covão do Feto, 27.iv.2014, 1♂, *det.* Castro, *leg.* M. Jenner.

Alto Alentejo, Évora, Juromenha, 25.v.2017, 1♀, *det. & leg.* Castro.

Baixo Alentejo, São Sebastião dos Carros, 7.v.2017, 1♂, *det. & leg.* Cross.

Algarve, Amoreira, 3.vi.2015, 1♀, 17.v.2018, 1♂, *det. & leg.* Cross.

Algarve, Burgau, 2.iv.2017, 1♂, 1♀, 20.iv.2017, 1♂, *det. & leg.* Cross.

Algarve, Carrapateira dunes, 2.v.2005, 1♀; Monchique, 2.v.2005, 1♀, *det. & leg.* Smit.

Algarve, Salema, 21.v.2016, 1♂, *det. & leg.* Cross.

Algarve, Silves, 20.iv.2005, 2♂, *det.* Castro, *leg.* Baldock.

**Genus *Hemipterochilus* Fertton, 1909**

1 species.

***Hemipterochilus fairmairi* (Saussure, 1853)**

Central & Southern Portugal, rare, 1 record.

GIORDANI SOIKA 1966: (as *Pterocheilus invasor* Dism.) Albufeira (= Lagoa de Albufeira), 10.vi.1956, 1♀ 3♂.

DINIZ 1978: Cabo de Sines, Porto Alto.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 1♀, 1♂, *det. & leg.* Castro.

**Genus *Katamenes* Meade-Waldo, 1910**

1 species. Prey: larvae of Lepidoptera.

***Katamenes arbustorum* (Panzer, 1799)**

Widespread, rare, 5 records.

ANDRÉ 1881: (as *Eumenes arbustorum* H. Sch.) “Portugal”.

DINIZ 1978: Mata do Fundão.

Trás-os-Montes, Bragança, Montesinho, 29.vi.2016, 1♂, *det. & leg.* Wood.



Trás-os-Montes, Pardelhas, 12.vi.2017, 1♀, *det. & leg.* Cross.  
Beira Alta, Gouveia, Paços da Serra, 21.vii.1966, 1♀ *det.* Castro. MNHNC, coll. Mendça.  
Beira Baixa, Castelo Branco, Penhas da Saúde, 5.ix.2017, 1♂, *det. & leg.* Castro.  
Algarve, Cerro do Sto. Miguel, 28.iv.2016, 1♀, *det.* Castro, *leg.* Wood.

**Genus *Leptochilus* Blüthgen, 1939**

9 species. Prey: larvae of Lepidoptera and Coleoptera.

***Leptochilus alpestris* (Saussure, 1855) ssp. *iberobarbarus* Blüthgen, 1953**

Central & Southern Portugal, frequent, 26 records. (Fig. 22).

BLÜTHGEN 1953C: Lisboa, 14.vi.1946, 1♀. (Estremadura).  
GUSENLEITNER 1995: Algarve (no localities are mentioned).  
Estremadura, Baixo Alentejo, Algarve.

***Leptochilus brussiloffi* (Dusmet, 1917)**

Central & Southern Portugal, scarce, 10 records.

BLÜTHGEN 1953A: Carcavelos, 1.vi.1950, 1♀; Lisboa, 2.v.1945, 1♂; 20-30.v.1949, 2♀; S. João do Estoril, 25.v.1947, 1♀. Algarve, Aljezur, Ponte da Atalaia, 2.v.2005, 1♀, *det. & leg.* Smit.  
Algarve, Pêra, Praia Grande, 30.iv.2016, 1♂, 1.v.2016, 1♀, 27.v.2016, 1♀, *det. & leg.* Cross.  
Algarve, Pêra, Praia Grande, 17.iv.2017, 1♂, 15.v.2017, 1♂, 1♀, 30.v.2017, 1♀, *det. & leg.* Cross.  
Algarve, Pêra, Praia Grande, 10.v.2018, 1♂, *det.* Castro, *leg.* Cross.  
Algarve, Ponta do Castelo, 24.iv.2017, 1♂, *det. & leg.* Smit.  
Algarve, Salema, 4.v.2016, 1♀, *det. & leg.* Cross.

**\**Leptochilus castilianus* Blüthgen, 1951**

Southern Portugal, rare, 1 record.

Baixo Alentejo, Mértola, Mina do São Domingos, 3.vi.2016, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

***Leptochilus duplicatus* (Klug in Waltl, 1835)**

Central & Southern Portugal, common, 58 records.

BLÜTHGEN 1953A: Portimão, 4♀ 3♂; Praia da Rocha, 29.vii.1950, 1♀; Tróia, 2.v.1951, 1♂.  
DINIZ 1978: Vila Real de Santo António.  
Estremadura, Baixo Alentejo, Algarve.

***Leptochilus flegias* (Giordani Soika, 1938)**

Southern Portugal, rare.

GUSENLEITNER 2007B: Algarve, Monte Gordo, 12-19. iii.1999, 1♀, *leg.* M. Boness.

***Leptochilus ibizanus* (Schulthess, 1934)**

Widespread, rare, 2 records.

BLÜTHGEN 1953A: Resende, 27.iv.1950, 1♂; 7.v.1950, 1♂.  
BLÜTHGEN 1956: Porto, 14.vii.1954, 2♀.  
SANZA *et al.* 2003: Castelo Branco, Unhais da Serra, 25.vi.1987, 3♀ 1♂, *leg.* F. Torres.  
Beira Baixa, Castelo Branco, Torre (Idanha-a-Nova), 26.iv.2017, 3♀, 1♂, *det. & leg.* Castro.  
Algarve, Vale da Telha, 6.v.2017, 1♀, *det. & leg.* Cross.

***Leptochilus medanae* (Gribodo, 1886)**

Widespread, scarce, 15 records.

BLÜTHGEN 1953A: Resende, 2.x.1946, 1♀; Vale de Gaio, 19.viii.1947, 1♀.  
DINIZ 1978: Sines, Tabuaço.  
GONZÁLEZ *et al.* 2009: Viseu (without any further details).  
Baixo Alentejo, Mértola, 4.vi.2016, 1♂, *det. & leg.* A. Livory & R. Coulomb.  
Baixo Alentejo, Mértola, 5.vi.2016, 2♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.  
Baixo Alentejo, Vila Nova de Milfontes, 18.v.2012, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.  
Baixo Alentejo, Zambujeira do Mar, 17.vi.2012, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.  
Algarve, Boca do Rio, 6.x.2018, 1♀, *phot. & det.* Cross.  
Algarve, Cacela Velha, 1.v.2017, 1♀, *det. & leg.* Cross.  
Algarve, Carrapateira, 21.vii.2005, 1♀, *det.* Castro, *leg.* M. Howe.  
Algarve, Carrapateira, 14.ix.2014, 1♂, 1♀, *det. & leg.* A. Livory & R. Coulomb.  
Algarve, Carrapateira, 4.viii.2015, 1♀; 4.ix.2015, 1♀; 15.ix.2016, 1♀, *det. & leg.* Cross.  
Algarve, Carrapateira, 14.ix.2016, 1♂, *det. & leg.* Baldock.  
Algarve, Lagos, Ponta da Piedade, 16.ix.2015, 1♀; 18.ix.2015, 1♂, *det.* Castro, *leg.* Wood.  
Algarve, Odeceixe, 4.vii.2009, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

***Leptochilus regulus* (Saussure, 1855)**

Central & Southern Portugal, scarce, 13 records.

DUSMET 1931: (as *Odynerus gallicus* Sauss.) Herdade da Mitra, 1921, 2♂.

BLÜTHGEN 1953A: Estoril, 2♀; Lisboa, 5♂; Portimão, 1♀ 1♂; Vale de Gaio, 15.viii.1947, 1♀.

BLÜTHGEN 1956: Aljustrel, 20.vi.1952, 1♀; Évora, 3.vii.1953, ♀; Oeiras, 14.vi.1953, 1♂; Tabuaço, ix.1952, 1♂.

DINIZ 1959: Elvas.

DINIZ 1978: Carcavelos, Évora, Monte Gordo, Vila Real de Santo António.

Baixo Alentejo, Miróbriga, 19.vii.2016, 1♂, *det.* Castro, *leg.* M. & E. Howe.

Algarve, Bensafirim, 28.viii.2015, 1♂, *det.* & *leg.* Cross.

Algarve, Burgau, 11.vi.2015, 1♀, *det.* & *leg.* Cross.

Algarve, Burgau, 4.vi.2017, 1♀, *det.* & *leg.* Cross.

Algarve, Carrapateira, 14.ix.2016, 1♂, 1♀, *det.* & *leg.* Cross.

Algarve, Faro, Bordeira, 20.ix.2010, 1♀, *det.* Castro, *leg.* H. Whiteley.

Algarve, Guia, 15.vii.2009, 2♂, 1♀, *det.* Castro, *leg.* Baldock.

Algarve, Lagos, Ponta da Piedade, 2.vi.2015, 1♂, *det.* & *leg.* Cross.

Algarve, Odeceixe, 9.vii.2009, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Algarve, Pêra, Praia Grande, 18.v.2016, field, *det.* Cross.

Algarve, Ponta do Castelo, 24.iv.2017, 1♂, *det.* & *leg.* Smit.

Algarve, Praia da Figueira, 27.ix.2018, 1♀, *det.* Cross.

Algarve, Salema, Boca do Rio, 21.v.2016, 1♂, 20.ix.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Silves, 14.viii.2015, 1♀, *det.* & *leg.* Cross.

***Leptochilus tarsatus* (Saussure, 1855)**

Northern Portugal, rare.

BLÜTHGEN 1953A: Porto, 1♀.

**Genus *Microdynerus* Thomson, 1874**

6 species. Prey: larvae of Coleoptera: Curculionidae.

***Microdynerus abdelkader* (Saussure, 1856)**

Central & Southern Portugal, rare, 5 records. (Fig. 23).

BLÜTHGEN 1953A: Seixal, 8.vi.1946, 1♀ (Estremadura).

Algarve, Alvor dunes, 6.v.2005, 1♀, *det.* Castro, *leg.* Smit.

Algarve, Lagos, Ponta de Piedade, 9.iv.2015, 1♀, *det.* Castro, *leg.* Cross.

Algarve, Pêra, Praia Grande, 1.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Pêra, Praia Grande, 15.v.2017, 1♀, *det.* & *leg.* Cross.

Algarve, Pêra, Praia Grande, 10.v.2018, 1♀, *det.* & *leg.* Cross.

***Microdynerus exilis* (Herrich-Schaeffer, 1839)**

Widespread, frequent, 31 records.

BLÜTHGEN 1953A: Estoril, 10.vi.1948, 1♀; Lisboa, 2.v.1945, 2♂; Porto, 1♂.

BLÜTHGEN 1956: Resende, 17.vii.1953, 1♀; Seixal, 30.v.1954, 1♂.

Trás-os-Montes, Beira Alta, Beira Baixa, Alto Alentejo, Baixo Alentejo, Algarve.

***Microdynerus lusitanicus* (Blüthgen, 1953)**

Transferred to *Microdynerus* from *Leptochilus* by CASTRO & SANZA (2009).

BLÜTHGEN 1953A: (as *Leptochilus*) Resende, 3♀ 1♂.

**[*Microdynerus perezii* (Berland, 1927) = *Alastorynerus perezii*]**

***Microdynerus robustus* (Dusmet, 1903)**

Central & Southern Portugal, rare, 3 records.

DUSMET 1931: (as *M. timidus* Sauss. var. *robustus* Dism.) Aldeia Nova de S. Bento, 1♀.

DINIZ 1978: (as *Pseudomicrodynerus robustus*) Resende, Viseu.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 27.v.2017, 1♂, *det.* & *leg.* Castro.

Baixo Alentejo, Mértola, 5.vi.2016, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Baixo Alentejo, Mina de São Domingos, 3.v.2017, 1♂, *det.* Castro *leg.* Cross.

**\**Microdynerus rufus* Giordani Soika, 1971**

Central & Southern Portugal, rare, 5 records.

Beira Baixa, Castelo Branco, Monsanto, 25.iv.2017, 2♀, 3♂, *det.* & *leg.* Castro.

Beira Baixa, Castelo Branco, Torre (Idanha-a-Nova), 26.iv.2017, 1♂, *det.* & *leg.* Castro.

Beira Baixa, Guarda, Escalhão, 28.iv.2017, 1♂, *det. & leg.* Castro.  
Baixo Alentejo, Mina de São Domingos, 3.v.2017, 1♀, *det.* Castro *leg.* Cross.  
Algarve, Barragem da Bravura, 15.v.2018, 1♀, *det. & leg.* Cross.

***Microdynerus timidus* (Saussure, 1856)**

Northern & Southern Portugal, scarce, 6 records.

BLÜTHGEN 1953A: Resende, 25.viii.1951, 1♀.  
Trás-os-Montes, Vila Real norte, 28.vi.2016, 1♀, *det.* Castro, *leg.* Wood.  
Douro Litoral Amarante, Chapa, Linha do Tamega 18.vi.2016, 1♀, *det. & leg.* Cross.  
Beira Baixa, Freimoninho, 23.vii.2018, 1♀, *det.* Cross, *leg.* M. & E. Howe.  
Baixo Alentejo, Mina de São Domingos, 3.vi.2016, 1♀, *det. & leg.* A. Livory & R. Coulomb.  
Alto Alentejo, Évora, Estremoz, 25.v.2017, 1♂, *det. & leg.* Castro.  
Algarve, Tavira, Cabanas, 31.v.2016, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

**Genus *Odynerus* Lateille, 1802**

9 species. Prey: larvae of Coleoptera: Chrysomelidae and Curculionidae.

**\**Odynerus albopictus* (Saussure, 1856)**

Southern Portugal, rare, 7 records.

Algarve, Alvor, 30.iv.2005, 1♂, *det. & leg.* Smit.  
Algarve, Boca do Rio, 25.iv.2017, 1♂, *det. & leg.* Cross.  
Algarve, Carrapateira, 26.iv.2016, 1♂, *det.* Cross/Castro, *leg.* Cross.  
Algarve, Carrapateira, 23.iv.2017, 1♂, *det. & leg.* Smit.  
Algarve, Salema, Boca do Rio, 28.v.2016, 1♂, *det.* Cross/Castro, *leg.* Cross.  
Algarve, Salema, Carriços, 11.v.2016, 1♂, *det.* Cross/Castro, *leg.* Cross.  
Algarve, Silves, 3.v.2005, 3♀, *det.* Castro, *leg.* Smit.

***Odynerus annulicornis* (Blüthgen, 1956)**

Central & Southern Portugal, scarce, 14 records. (Fig. 24).

BLÜTHGEN 1956: “Portugal”, 2♂.  
Beira Baixa, Castelo Branco, Torre (Idanha-a-Nova), 26.iv.2017, 1♂, *det. & leg.* Castro.  
Beira Baixa, Castelo Branco, Toulões, 27.iv.2017, 1♂, *det. & leg.* Castro.  
Ribatejo, Gogela, Paúl do Boquilobo NP, 28.iv.2014, 1♂, 2♀, *det.* Castro, *leg.* M. Jenner.  
Alto Alentejo, Mértola, Alcaria river, 25.iii.2016, 1♂, *det.* Castro, *leg.* A. Gonçalves.  
Algarve, Ria de Alvor, 19.iv.2006, 1♀, *det.* Castro, *leg.* M. & E. Howe.  
Algarve, Amoreira, 13.iv.2015, 1♀, *det. & leg.* Cross.  
Algarve, Mexilhoeira Grande, 11/28.iii.2015, 2♂, *det.* Baldock, *leg.* J. D’Haeseleer.  
Algarve, Pêra, Praia Grande, 30.iii.2015, 2♂, *det. & leg.* Cross.  
Algarve, Pêra, Praia Grande, 1.v.2016, 13.v.2016, 15.v.2016, 1♂, 2♀, *det. & leg.* Cross.  
Algarve, Pêra, Praia Grande, 15.v.2017, 1♀, *det. & leg.* Cross.  
Algarve, Vilarinha, 5.iv.2017, 1♂, 15.iv.2017, 1♀, *det. & leg.* Cross.

***Odynerus consobrinus* Dufour, 1839**

Central & Southern Portugal, scarce, 6 records. (Fig. 25).

BLÜTHGEN 1953A: (as *Hoplomerus*) Caparica, 20.iii.1946, 1♀; Estoril, 8♀ 1♂; Torre da Marinha, 1♀.  
BLÜTHGEN 1956: (as *Hoplomerus*) Corroios, 2.iv.1953, 1♀; Lisboa, 11.iv.1954, 1♀ 1♂; Seixal, 17.iv.1954, 2♀.  
DINIZ 1978: Carcavelos, Faro, Mata do Fundão, Vila Velha do Ródão.  
Algarve, Amoreira, 2.iv.2015, field, *det. & leg.* Cross.  
Algarve, Armação de Pêra, 20.iv.2006, 1♀, *det.* Castro, *leg.* Baldock.  
Algarve, Bensafirim, 5.iii.2015, 1♂, 1♀, *det. & leg.* Cross.  
Algarve, Guia, 12.iii.2009, 2♂, 2♀, *det.* Castro, *leg.* Baldock.  
Algarve, Lagos, Ponta da Piedade, 29.ii.2016, 1♀, *det. & leg.* Cross.  
Algarve, Rasmalho, 16.iii.2015, 1♂, *det. & leg.* Cross.

***Odynerus dusmeticus* Giner Mari, 1945**

Central & Southern Portugal, scarce, 6 records.

BLÜTHGEN 1953A: A) (as *Hoplomerus melanocephalus* (Gmelin, 1790)) Estoril, 8.iv.1951, 1♀; Lisboa, 6.iv/7.v.1946, 3♂; S. João do Estoril, 9.iv.1947, 1♂; Sintra, 27.iv.1951, 1♂. The description provided by Blüthgen in the paper made it clear that these males actually belong to *O. dusmeticus*, and in fact the author himself later (1956) said that all the Portuguese specimens he had seen belong to “ssp.” *dusmeticus* GINER MARI. B) (as *Hoplomerus cruralis* (Saussure, 1856)) Resende, 20.v.1950, 1♀. *Odynerus cruralis* is an exclusively North-African species and the fact that it was

recorded from Portugal by Blüthgen must be attributed to the very strong similarity of *cruralis* females and those of *O. dusmeticus*; the males of the two species are also rather similar, but can be easily separated on structural grounds.)

Estremadura, Cabo Espichel, 16.v.2012, 1♂, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Algarve, Alvor, 30.iv.2005, 1♀, *det.* & *leg.* Smit.

Algarve, Guia, 20.iv.2005 1♀; 20.iv.2006, 1♂, *det.* Castro, *leg.* Baldock.

Algarve, Pêra, Praia Grande, 17.iv.2017, 1♀, *det.* Castro, *leg.* Cross.

Algarve, Vila do Bispo, Praia do Zavial, 15.iv.2006, 1♂, *det.* Castro, *leg.* M. & E. Howe.

### ***Odynerus eburneofasciatus* Dusmet, 1903**

Central & Southern Portugal, scarce, 13 records.

BLÜTHGEN 1953A: (as *Hoplomerus Antigai* Dusmet, 1903) Lagoa de Albufeira, 3.v.1951, 1♂; Lisboa, 31.v.1948, 1♀; (as *Hoplomerus eburneofasciatus*) Torre da Marinha, 24.iv.1947, 1♀.

BLÜTHGEN 1956: (as *Hoplomerus Antigai* (Dusmet, 1903)) Aljustrel, 3.v.1953, 1♀; Montijo, 3.v.1953, 1♀.

HAESLER 1997: Amarante, 30.iv.1990, 1♂, *leg.* F. Gusenleitner (coll. J. Gusenleitner).

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 30.iv.2007, 1♀ 1♂, *det.* & *leg.* Castro.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 26/27.iv.2017, 1♀, 3♂; 27.v.2017, 1♀; all *det.* & *leg.* Castro.

Beira Baixa, Castelo Branco, Torre (Idanha-a-Nova), 26.iv.2017, 2♂, *det.* & *leg.* Castro.

Beira Baixa, Castelo Branco, Toulões, 27.iv.2017, 1♀, *det.* & *leg.* Castro.

Estremadura, Bucelas, 17.v.1969, 1♀, *det.* Castro, MNHNC, coll. Mendoça.

Baixo Alentejo, Sinceira Grande (1.5 km SW. Of Corte Zorrinho), 26.v.2009, 1♀, *det.* Castro, *leg.* V. Mauss.

Algarve, Aljezur, W of Vale de Telha, 1-9.v.2016, 1♂, *det.* Castro, *leg.* Wood.

Algarve, Amoreira, 13.iv.2015, field, *det.* & *leg.* Cross.

Algarve, Barragem da Bravura, 15.v.2018, 1♂, 1♀, *det.* & *leg.* Cross.

Algarve, Budens, 24.v.2016, 1♀, *det.* & *leg.* Cross.

Algarve, Budens, 14.v.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Fontes da Matosa, 21.iv.2017, 1♂, *det.* & *leg.* Smit.

### **\**Odynerus femoratus* Saussure, 1856**

Northern Portugal, rare, 1 record.

Trás-os-Montes, Reconco, 3.vii.2016, 1♀, *det.* Castro, *leg.* Wood.

### **[*Odynerus melanocephalus* (Gmelin, 1790)]**

These records are doubtful, since they may well belong to *O. dusmeticus* like all other Portuguese specimens published previously.

DINIZ 1978: Caparica, Carcavelos, Figueira da Foz.

### **\**Odynerus navasi* Dusmet, 1903**

Central and Southern Portugal, rare, 2 records.

Estremadura, Setúbal, Sesimbra, 16.v.1971, 1♂, *det.* Castro, *leg.* N.N.Mendoça, MNHNC.

Alto Alentejo, Rosário, 28.v.1978, 1♀, *det.* Castro, *leg.* & coll. A. Serrano, MNHNC.

### **[*Odynerus reniformis* (Gmelin, 1790)]**

Portuguese records of “*Odynerus reniformis*” (Gmelin, 1790) may or may not correspond to this species, as the list of the Iberian species of the genus *Odynerus* has greatly increased since the publication of the papers involved and several very similar species are now known to occur on the peninsula, with most of the older Spanish records now known to correspond to *O. mutilatus* Gusenleitner, 1977, *O. annulicornis*, etc. *Odynerus reniformis* has been recorded from several Portuguese localities:

SAUNDERS 1881: (as *Odynerus (Oplopus) dufourii*) Almodôvar, 7.v.1880, 2♀.

DUSMET 1931: (as *Odynerus (Hoplomerus) reniformis* L.) Álamo, 1♂.

DINIZ 1959: Aldeia Nova de S. Bento.

### ***Odynerus spinipes* (Linnaeus, 1758)**

Central Portugal, rare.

DINIZ 1978: Coimbra, Zouparria, Serra do Gerês (Beira Litoral).

### ***Odynerus wilhelmi* Dusmet, 1917**

Central & Southern Portugal, rare, 2 records.

BLÜTHGEN 1953A: (as *Hoplomerus*) Lisboa-Benfica, 16.iv.1947, 1♀ 2♂; 30.iv.1947, 1♀.

Algarve, Pêra, Praia Grande, 1.v.2016, 1♂, 1♀, *det.* & *leg.* Cross.

Algarve, Santa Caterina da Fonte do Bispo, 4.v.2005, 1♂, *det.* Smit/Castro, & *leg.* Smit.

**Genus *Onychopterocheilus* Blüthgen, 1955**

2 species.

***Onychopterocheilus matritensis* (Dusmet, 1909)**

Central & Southern Portugal, scarce, 7 records.

BLÜTHGEN 1956: "Portugal", 1♂.

Estremadura, Monte Redondo, 25.vi.1996, 1♀, *det.* Castro, *leg.* M. Jenner.

Estremadura, Sesimbra, 16.v.1971, 1♂, *det.* Castro. MNHNC, coll. Mendocça.

Estremadura, Setúbal, *det.* Castro, *leg.* Artur Serrano. MNHNC.

Alto Alentejo, Évora, 28.v.1978, *det.* Castro, *leg.* Artur Serrano. MNHNC.

Baixo Alentejo, Rosário, *det.* Castro, *leg.* Artur Serrano. MNHNC.

Algarve, Aljezur, W of Vale da Telha, 1-9.v.2016, 1♂, 1♀, *det.* Castro, *leg.* Wood.

Algarve, Ponta da Atalia, 6.v.2017, 1♀, *det.* & *leg.* Cross.

***Onychopterocheilus rectus* (Dalla Torre, 1889)**

Larvae of the Elachistid moth *Ethmia bipunctella* (Fabricius, 1775) have been confirmed as the prey in Spain (CROSS 2017). In Portugal females have been observed hunting among *Echium*, the moth's foodplant, so the same prey is probably used in Portugal.

Central & Southern Portugal, rare, 4 records. (Fig. 26).

DINIZ 1978: (as *Pterocheilus daw* (Dusmet, 1903)) Montemor-o-Velho.

Algarve, Pêra, Praia Grande, 27.v. 2016, 1♀, 30.v.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Pêra, Praia Grande, 28.v. 2018, 1♀, 16.vi.2018, 1♀, all *det.* Cross.

**Genus *Parodontodynerus* Blüthgen, 1938**

1 species. Prey: larvae of Coleoptera.

***Parodontodynerus ephippium* (Klug, 1817)**

Widespread, frequent, 16 records.

BLÜTHGEN 1953A: Cascais, 30.vii.1947, 1♀; Estoril, 3.vi.1951, 1♀; 15.vii.1951, 1♂; Lisboa, 31.v. 1945, 1♀; Resende, 24.viii.1951, 1♀; 2.x.1946, 1♀.

DINIZ 1978: Tabuaço.

Trás-os-Montes, Douro Litoral, Baixo Alentejo, Algarve.

**Genus *Pseudepipona* Saussure, 1856**

3 species. Prey: larvae of Lepidoptera.

**\**Pseudepipona herrichii* (Saussure, 1856)**

Southern Portugal, rare, 3 records. (Fig. 27).

Algarve, Aljezur, Ponta da Atalaia, 2.v.2005, 1♂, 1♀, *det.* & *leg.* Smit.

Algarve, Aljezur, W of Vale de Telha, 1-9.v.2016, 1♀, *det.* Castro, *leg.* Wood.

Algarve, Ponta da Atalia, 6.v.2017, 1♀, *det.* & *leg.* Cross.

***Pseudepipona lativentris* (Saussure, 1855)**

Widespread, rare, 3 records.

DUSMET 1931: (as *Odynerus*) Mitra, 1♂.

BLÜTHGEN 1953A: Alto do Estoril, 15.vii.1947, 1♀; S. João do Estoril, 21-27.iv.1948, 2♀ 1♂.

BLÜTHGEN 1956: Cova do Vapor, 22.vii.1951, 1♂; Resende, 16.vii.1953, 1♀.

DINIZ 1959: Estoril.

DINIZ 1978: Coimbra, Montemor-o-Velho.

Estremadura, Cabo Espichel, 4.vi.2011, 1♀, *det.* Castro, *leg.* A. Livory & R. Coulomb.

Estremadura, Nazaré, 19.viii.2015, 1♂, 1♀, *det.* & *leg.* A. Livory & R. Coulomb.

Algarve, Amoreira, 11.iv.2015, 1♂, *det.* Castro, *leg.* Cross.

***Pseudepipona sessilis* (Saussure, 1853)**

Central Portugal, rare.

DINIZ 1978: Poiães, Torre (Serra da Estrela).

**Genus *Pterocheilus* Klug, 1805**

1 species.

***Pterocheilus phaleratus* (Panzer, 1797)**

Four subspecies are found in the Iberian Peninsula (CASTRO 2003). The two Portuguese records that have been critically examined are of the subspecies *boreoibericus* Castro, 2003. Given that the few records from the

north are from upland areas it is likely that all these are of the same subspecies. They are certainly highly unlikely to be subspecies *yeguasicus* Blüthgen, 1951 as this is currently restricted to high ground in southern Spain. The three specimens from the Serra da Estrela could be *boreoibericus* or the nominate subspecies *phaleratus*. The latter has been found in the Sistema Central in Spain, of which the Serra da Estrela is effectively a continuation. To further complicate the situation, there is a possibility that some material belongs to the very similar *P. luteiscapus* Gusenleitner, 1979. All the Portuguese material would benefit from critical examination.

Northern & Central Portugal, rare, 3 records.

SAUNDERS 1881: 15.vi.1880, 1♂, leg. A. Eaton. No locality given.

BLÜTHGEN 1953A: (as *P. phaleratus* ssp. *yeguasicus* Blüthgen, 1951) Resende, 24-25.viii.1951, 2♀  
2♂.

BLÜTHGEN 1956: (as *P. phaleratus yeguasicus* Blüthgen, 1951) Porto, 14.vii.1954, 1♂.

DINIZ 1959: Resende.

DINIZ 1978: (as *P. phaleratus* ssp. *yeguasicus* BLÜTHGEN) Amarante, Viseu.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, viii.1987, 1♀; Penhas da Saúde, 18.vii.1990, 1♀,  
(det. J. Gusenleitner).

Beira Alta, Manteigas, Vale do Zêzere, 14.vi.2016, 1♀, det. & leg. A. Livory & R. Coulomb.

**- subsp. *boreoibericus* Castro, 2003**

Trás-os-Montes, Vila Real, 1km E of Pardelhas, 28.vi.2016, 1♀, leg. Wood, det. Wood/Castro.

Trás-os-Montes, Pardelhas, 11.vi.2017, 1♀, det. & leg. Cross.

**Genus *Rhynchium* Spinola, 1806**

1 species.

***Rhynchium oculatum* (Fabricius, 1781)**

Southern Portugal, scarce, 9 records.

BLÜTHGEN 1953A: Portimão, 15.viii.1951, 1♀.

DINIZ 1978: Monte Gordo, Vila Real de Santo António.

Baixo Alentejo, Alcácer do Sal, 1.vii.2016, 1♂, det. Castro, phot. L. O. Aguado.

Baixo Alentejo, Moura, 27.ix.2014, 1♂, 2♀, det. & leg. A. Livory & R. Coulomb.

Algarve, Faro, 19.vii.2012, 1♂, phot. V. Jacinto (BV).

Algarve, Lagos, 4.vi.1987, 1♂, 15.vi.1987, 1♀; both det. Castro, leg. H. Tussac, coll. B. Gereys.

Algarve, Silves, 12.x.2010, 2♂; 10.vi.2011, 1♀; 22.vii.2014, 1♀, all det. & leg. Baldock.

Algarve, Vilamoura, 16.ix.2018, 1♂, det. & leg. Cross, both sexes abundant.

**Genus *Stenodynerus* Saussure, 1863**

4 species.

***Stenodynerus chevrieranus* (Saussure, 1855)**

Central Portugal, rare, 1 record.

BLÜTHGEN 1953A: (as *Nannodynerus chevrieranus* (Sauss.) var. *eximia* Blüthgen, 1953) Resende,  
28.viii.1946, 1♀.

DINIZ 1978: Coimbra, Mata do Fundão.

Beira Baixa, Castelo Branco, Salvaterra do Extremo, 4.ix.2017, 1♀, det. & leg. Castro.

***Stenodynerus fastidiosissimus* (Saussure, 1855)**

Widespread, common, 44 records.

BLÜTHGEN 1953A: (as *Nannodynerus*) Estoril, Monchique, Resende, Vale de Gaio.

GIORDANI SOIKA 1966: (as *Nannodynerus vergesi* Giordani Soika) Caparica, Fontanellos (= Fontanelas?),  
Murtal.

DINIZ 1978: (as *S. fastidiosissimus*) Amarante, Monchique, Vale de Gaio, Vila Real de Santo António;  
(as *S. difficilis ferrugineitarsis* (Destefani, 1889)) Lisboa.

Douro Litoral, Beira Baixa, Estremadura, Ribatejo, Alto Alentejo, Algarve.

***Stenodynerus lacetanicus* (Blüthgen, 1953)**

Widespread, rare, 4 records.

BLÜTHGEN 1953A: (as *Nannodynerus*) Resende, 16.ix.1946, 1♂; 2.x.1946, 1♀.

BLÜTHGEN 1956: (as *Nannodynerus*) Massorra, 5.ix.1948, 1♂.

DINIZ 1978: Amarante, Castelo Branco, Valença do Minho.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, viii.1987, 1♀, Vale da Candieira, 2.viii.1990, 1♀

Trás-os-Montes, Pardelhas, 1.ix.2018, 1♂, det. & leg. Cross.

Douro Litoral, Loivos do Monte, 8.ix.2016, 1♀, det. Cross/Castro, leg. Cross.

Beira Baixa, Castelo Branco, Penhas da Saúde, 7.ix.2017, 1♀, det. & leg. Castro.

Algarve, Odeceixe, 24.vii.2010, 1♂, det. Castro, leg. A. Livory & R. Coulomb.

***Stenodynerus steckianus* (Schultess, 1897)**

This is the current name of the taxon also known as *S. teutonicus* (Blüthgen, 1937): see GUSENLEITNER (1981). Northern Portugal, rare.

BLÜTHGEN 1953A: (as *Nannodynerus teutonicus* Blüthgen) Resende, 26.ix.1944, 1♀.

**Genus *Symmorphus* Wesmael, 1836**

3 species.

***Symmorphus crassicornis* (Panzer, 1798)**

Central Portugal, rare.

DINIZ 1978: Mata do Fundão.

***Symmorphus gracilis* (Brullé, 1832)**

Central & Southern Portugal, scarce, 14 records.

DUSMET 1931: (as *Odynerus (Symmorphus) elegans* Wesmael, 1853) Mata de Leiria, 1921, 1♂.

BLÜTHGEN 1953A: (as *Odynerus*) Lisboa, 3.v.1946, 1♀.

BLÜTHGEN 1956: (as *Odynerus*) Caxias, 13.v.1954, 1♀ 1♂.

DINIZ 1978: Monchique, Portimão.

Beira Litoral, Leiria, Monte Redondo, 19.v.1996, 1♂, *det.* Castro, *leg.* M. Jenner.

Alto Alentejo, Évora, Estremoz, 25.v.2017, 1♂, *det.* & *leg.* Castro.

Algarve, Aljezur, W of Vale de Telha, 1-9.v.2016, 1♂, 1♀, *det.* Castro, *leg.* Wood.

Algarve, Amoreira, 3.vi.2015, ♀, 15.vi.2015, 1♂, 1♀, *det.* & *leg.* Cross.

Algarve, Amoreira, 3.v.2016, 2♂, *det.* & *leg.* Cross.

Algarve, Amoreira, 1.vi.2017, field, *det.* Cross.

Algarve, Carrapateira, 8.vi.2016, 1♂, *det.* & *leg.* Cross.

Algarve, Carrapateira, 24.iv.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Carrapateira, 5.vi.2018, 1♀, *det.* & *leg.* Cross.

Algarve, Pedralva, 15.iv.2017, field, *det.* Cross.

Algarve, Praia do Cordama, 12.iv.2017, 1♂, *det.* & *leg.* Cross.

Algarve, Vale de Telha, 23.iv.2017, 1♂, 1♀, *det.* & *leg.* Smit.

Algarve, Vilarinha, 15.iv.2017, 1♂, *det.* & *leg.* Cross.

***Symmorphus murarius* (Linnaeus, 1758)**

Central Portugal, rare, 1 record.

DINIZ 1978: Viseu.

CUMMING 1989: Fóia, 25.vi.1978.

Ribatejo, Gogela, Paúl do Boquilobo NR, 28.iv.2014, 1♀, *det.* Castro, *leg.* M. Jenner.

**Genus *Syneuodynerus* Blüthgen, 1951**

1 species.

***Syneuodynerus egregius* (Herrich-Schaeffer, 1839)**

Widespread, frequent, 19 records.

BLÜTHGEN 1956: (as *Euodynerus egregius egregius*) Seixal, 7.vii.1954, 1♀.

DINIZ 1978: (as *Euodynerus (Syneuodynerus) egregius*) Góis.

Trás-os-Montes, Beira Baixa, Alto Alentejo, Baixo Alentejo, Algarve.

**Genus *Tropidodynerus* Blüthgen, 1939**

2 species.

***Tropidodynerus fertoni* (Dusmet, 1925)**

Iberomaghrebian (Morocco, Portugal, Spain) and Sardinia (CASTRO, 2007).

Central & Southern Portugal, scarce, 7 records.

BLÜTHGEN 1953A: (as *Tropidodynerus lusitanicus* Blüthgen, 1953) Lisboa, 20-30.v.1949, 4♀

BLÜTHGEN 1956: Estoril, 8.vi.1952, 1♀.

DINIZ 1978: Carcavelos, Coimbra.

GUSENLEITNER 2007A: Alvor, 30.iv.2005, 1♂, *leg.* Smit.

CASTRO 2007: (Includes a distribution map) Algarve, Guia, 28.iv.2004, 1♂; 20.iv.2005, 1♀; both *det.*

Castro, *leg.* Baldock; Estoril, 3.vi.1951, 1♀, *leg.* N.F. de Andrade.

Algarve, Cacela Velha, 31.v.2018, 1♀, *det.* & *leg.* Cross.

Algarve, Guia, 20.iv.2006, 1♂; Silves, 10.vi.2011, 1♂, 8♀, *det.* Castro, *leg.* Baldock.

Algarve, Pêra, 5.v.2005, 2♀, *det.* & *leg.* Smit.

Algarve, Pêra, Praia Grande, 13.v.2016, 2♂, 2♀, *det.* Castro, *leg.* Cross.  
Algarve, Pêra, Praia Grande, 15.v.2017, 1♀, *det.* & *leg.* Cross.  
Algarve, Pêra, Praia Grande, 13.vi.2018, 1♂, *det.* & *leg.* Cross, 1♀, *det.* Cross/Castro, *leg.* Cross.

**\**Tropidodynerus flavus* (Lepeletier, 1841)**

Southern Portugal, rare, 6 records. (Fig. 28).

Alto Alentejo, Évora, São Brás dos Matos, 25.v.2017, 3♀, *det.* & *leg.* Castro.  
Baixo Alentejo, A-do-Neves (8 km NNW of Almodôvar), 29.v.2009, 1♀, *det.* Castro, *leg.* V. Mauss.  
Algarve, Pêra, Praia Grande, 15.v.2016, 18.v.2016, 1♂, 2♀, *det.* Cross/Castro, *leg.* Cross.  
Algarve, Pêra, Praia Grande, 15.v.2017, field, several females at nests, *det.* Cross.  
Algarve, Pêra, Praia Grande, 13.vi.2018 1♀, photo, *det.* Cross.

## MASARINAE

**Genus *Celonites* Latreille, 1802**

2 species.

***Celonites abbreviatus* (Villers, 1789)**

Central & Southern Portugal, rare, 1 record.

RICHARDS 1962: Examined 1♀ from Portugal, *leg.* N.F. Andrade.  
DINIZ 1978: Coimbra, Resende.  
Algarve, Mexilhoeira Grande, 30.iv.2005, 1♂, 1♀ *det.* & *leg.* Smit.

**\**Celonites mayeti* Richards, 1962**

Southern Portugal, rare, 1 record.

Algarve, Olhão, Moncarapacho, 26.v.2012, 1 specimen (sex not discernible), phot. V. Jacinto (BV).

**Genus *Ceramius* Latreille, 1810**

3 species.

**\**Ceramius bischoffi* Richards, 1963**

Central & Southern Portugal, frequent, 21 records. There is one pollen record for Portugal: *Jasione montana* (Fig. 29).

Beira Baixa, Baixo Alentejo, Algarve.

***Ceramius fonscolombi* Latreille, 1810**

Central Portugal, rare.

DUSMET 1921: Estremoz, 1921, 3♀.  
RICHARDS 1962: Lisboa, 16.vi.1947, 1♂, 1♀, *leg.* N.F. Andrade.  
DINIZ 1978: Coimbra.

**[*Ceramius lusitanicus* Klug, 1824]**

All these records are probably attributable to *C. bischoffi*. Pending re-examination of the specimens and clarification of the status of *bischoffi* and *lusitanicus* it is felt best to refer all Portuguese material to *bischoffi*.

KLUG 1824: "Portugal", (1♂, no precise locality).  
SAUNDERS 1881: Monchique (Algarve), 19.v.1880, 1♀, *leg.* A.E. Eaton.  
DUSMET 1921: Estremoz, 1921, 1♀; Évora, 1921, 1♀.  
DINIZ 1959: Herdade do Álamo.  
RICHARDS 1962: Lisboa, 28.iv.1877, 1♀, BMNH. (W.W. Saunders coll.); Corroios, 2.iv. 1953, 1♂, 1♀; Lagoa de Albufeira, 3.v.1951, 1♀; Seixal, 17.iv.1954, 1♀; 1.v.1955, 1♂, 1♀. Resende, 7.v.1950, 1♀, all *leg.* N.F. Andrade.  
DINIZ 1978: Cernache, Góis, Salir.  
Alto Alentejo, Sta. Clara a Velha, 2.v.2002, 1♀, *det.* Castro, *leg.* Baldock.  
Baixo Alentejo, Mértola, 15 km S, 17.iv.2017, 1♀, *det.* & *leg.* Baldock.  
Algarve, 27.iv.1998, 1♀, *det.* Smit, *leg.* W. Fliervoet.

**\**Ceramius vechti* Richards, 1963**

Southern Portugal, rare, 2 records.

Algarve, Ponta da Atalaia 6.v.2017, 1♂; 17.v.2017, 1♀, *det.* & *leg.* Cross.

**Genus *Jugurtia* Saussure, 1854**

1 species.



***Jugurtia dispar* (Dufour, 1851)**

Central & Southern Portugal, scarce, 15 records. No pollen records have been published for Portugal but, where floral associations have been noted, *Jugurtia dispar* is consistently recorded on *Pulicaria paludosa*. (Fig. 30).

- DUSMET 1921: (as *J. oraniensis* Lep.) Estremoz, 1921, 3♂1♀.  
DUSMET 1931: (as *J. oraniensis* Lep.) Mitra, 1♀.  
BLÜTHGEN 1953A: (as *Jugurtia* aff. *dispar* Dufour) Setúbal, 1♂.  
RICHARDS 1962: Lisboa: 17.vi.1951, 2♂, 1♀; 8.vii.1951, 3♂; 3.viii.1948, 1♀; Évora: 3.vii.1953, 3♂; 4.vii.1953, 6♀; Estoril: 8.viii.1943, 1♀; 17.viii.1946, 1♂; Seixal, 7.vii.1954, 1♂, 1♀, all leg. N.F. Andrade.  
DINIZ 1978: Aljustrel, Monte Gordo, Vila Real de Santo António.  
Beira Baixa, Castelo Branco, Ladoeiro, 8.vii.2017, 1♂; 4.ix.2017, 1♀; both leg., coll. & det. Castro.  
Alto Alentejo, Montemor-o-Novo, Foros de Vale da Figueira, 22.vii.2016, 1♀; 30.vii.2016, 1♂, det. Baldock, leg. A. Albernaz Valente.  
Alto Alentejo, Portalegre, Santa Eulália, 7.vii.2017, 3♀, 1♂, det. & leg. Castro.  
Alto Alentejo, Portalegre, Vila Fernando, 7.vii.2017, 1♀, 1♂, det. & leg. Castro.  
Baixo Alentejo, Mértola, 20 km N, 5.viii.2002, 2♀, det. J. Gusenleitner, leg. C. Schmid-Egger.  
Algarve, Abicada, station Figuiera, 19.viii.2015, 1♀, det. Baldock, leg. J. D'Haeseleer.  
Algarve, Barragem de Bravura, 25.vii.2015, 2♂, 1♀; 24.vi.2018, 1♂, field; all det. & leg. Cross.  
Algarve, Pêra, Praia Grande, 13.vi.2018, 1♂; 7.ix.2018, 1♂; det. Cross.  
Algarve, Praia do Vale da Lama, 18.vi.2018, 1♂, field det. Cross.  
Algarve, Silves, 22.vi.2014, 1♀, det. Castro, leg. Baldock.  
Algarve, Silves, Barragem do Arade, 5.viii.2015, 1♀, det. & leg. Cross.

**Genus *Quartinia* André, 1884**

1 species.

***Quartinia parvula* Dusmet, 1909**

Southern Portugal, rare.

- RICHARDS 1962: Tróia, 8.vii.1956, 24♂, 7♀, leg. N.F. Andrade  
DINIZ 1978: Sines.

**POLISTINAE**

**Genus *Polistes* Latreille, 1802**

5 species. Social species. Of the five species recorded from Portugal one, *Polistes austroccidentalis*, is a social parasite of other *Polistes*. However, there are no Portuguese host records.

**[*Polistes associus* Kohl, 1898]**

The numerous Portuguese records given by Diniz (1978) are rather surprising, since the species has not been recorded from Spain. This material probably belongs, instead, to *P. nimpha*, which is a very variable species and is widespread in Iberia.

***Polistes austroccidentalis* van Achterberg & Neumeyer, 2017**

(= *P. semenowi* auctt. non Morawitz, see SCHMID-EGGER et al. (2017)).

Central & Southern Portugal, scarce, 9 records.

- DINIZ 1959: Portugal.  
DINIZ 1978: (as *Sulcopolistes*) Cabo Mondego, Castelo Branco, Coimbra, Eirol, Ericeira, Espinhal, Estoril, Miranda do Corvo, Monte Gordo, Serra da Gardunha, Serra do Gerês.  
SCHMID-EGGER et al. 2017: Alentejo (C.), Monforte ("Montfort"), Vaiamonte, iii.2012, 1♀ (paratype), leg. A. V. Harten (NCBNL); Porto, 1♀ (paratype) (MFNB) (no further data available).  
Beira Baixa, Castelo Branco, Penhas da Saúde, 5/7.ix.2017, 1♀, 1♂, det. & leg. Castro.  
Beira Baixa, Guarda, Mt. Estrela, 6.ix.2017, 1♂, det. & leg. Castro.  
Ribatejo, Coruche, Couco, 8.viii.2016, 1♂, det. Castro, leg. A. Livory & R. Coulomb.  
Baixo Alentejo, Alcácer do Sal, 16.vi.2016, 1♂, det. Castro, phot. L. O. Aguado.  
Alto Alentejo, Évora, Juromenha, 6.vii.2017, 1♂, det. & leg. Castro.  
Algarve, Guia, 4.v.2002, 1♀, det. Castro, leg. Baldock.  
Algarve, Aljezur, Praia de Amoreira, 2.v.2005, 1♀, det. & leg. Smit.  
Algarve, Silves, 19.vii.2014, 1♀, det. Castro, leg. Baldock.  
Algarve, Tavira, 2.viii.2010, 1♂, det. Castro, leg. A. Livory & R. Coulomb.

***Polistes biglumis* (Linnaeus, 1758)**

Central Portugal, rare, 4 records.

DINIZ 1959: (as *P. gallicus* var. *biglumis* F.) Famalicão.

KUHLMANN 1996: Serra da Estrela, Vale do Zêzere, 1000-1200m, viii.1987, 3♀, (det. J. Gusenleitner)  
Beira Baixa, Castelo Branco, Penhas da Saúde, 1390-1475m, 5/7.ix.2017, 3 workers, 3♂, det. & leg. Castro.

Beira Baixa, Guarda, Loriga, 1740m, 5.ix.2017, 1 worker, det. & leg. Castro.

Beira Baixa, Guarda, Manteigas, 1350m, 7.ix.2017, 1♂, det. & leg. Castro.

Beira Baixa, Guarda, Mt. Estrela, 1875m, 5.ix.2017, 1♂, det. & leg. Castro.

### ***Polistes dominula* (Christ, 1791)**

Widespread, common, 47 records. (Fig. 31).

DINIZ 1959: (as *P. gallicus*) Coimbra, Estremoz, Lisboa, Portimão, Setúbal, Sintra, Soure, etc.

ERLANDSSON 1974: Almeida, 15.xii.1970, 1♀.

KUHLMANN 1996: Serra da Estrela, 1987 and 1990.

Trás-os-Montes, Beira Litoral, Beira Alta, Beira Baixa, Estremadura, Alto Alentejo, Algarve.

### ***Polistes gallicus* (Linnaeus, 1767)**

Widespread, common, 50 records.

DUSMET 1931: (as *P. foederata* Kohl) Mitra, 1♀.

BLÜTHGEN 1953a: (as *P. omissus* Weyrauch): Aljezur, Odemira.

ZIRNGIEBL 1955: (as *P. omissus* Weyr.) Lisboa.

DINIZ 1959: (as *P. foederata* Kohl) Mitra.

Trás-os-Montes, Beira Litoral, Beira Baixa, Ribatejo, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

### ***Polistes nimpha* (Christ, 1791)**

Widespread, common, 31 records.

DINIZ 1959: (as *P. opinabilis* Kohl, 1898) "Portugal".

ERLANDSSON 1974: Almeida, 1♂.

DINIZ 1978: Armação de Pêra, Azenhas do Mar, Cardigos, Coimbra, Évora, Figueira da Foz, Lousã, Monte Gordo, Santo Tirso, Santa Rita, Sintra, Valença do Minho, Vila do Bispo, Vouzela.

Trás-os-Montes, Beira Litoral, Beira Baixa, Ribatejo, Alto Alentejo, Baixo Alentejo, Algarve.

[*Polistes semenowi* Morawitz, 1889 sensu auctt. = *Polistes austrooccidentalis*]

## **VESPINAE**

### **Genus *Dolichovespula* Rohwer, 1916**

1 species. Social species.

#### ***Dolichovespula sylvestris* (Scopoli, 1763)**

Northern & Central Portugal, rare, 5 records.

SAUNDERS 1881: (as *Vespa*) Trás-os-Montes, Vila Real, 24.vi.1880, 1♀; Ponte de Morcellos (= Ponte da Mucela?), 14.vi.1880, 1♀, both leg. A.E. Eaton.

DINIZ 1959: (as *Vespa*) Caminha.

DINIZ 1978: Coimbra, Mata do Fundão, Oliveira de Frades, Penhas da Saúde, Resende, S. Pedro do Sul, Serra da Gardunha, Serra do Gerês, Vila Real, Vouzela.

KUHLMANN 1996: Serra da Estrela, Penhas da Saúde, 20.vii.1990, 1♀.

Minho, Braga, Ruiivães, 16.v.2016, 1 queen at *Scrophularia* sp, det. & leg. Castro.

Beira Alta, Manteigas, 14.vi.2016, 1♀, det. & leg. A. Livory & R. Coulomb.

Beira Baixa, Castelo Branco, Penhas da Saúde, 7.ix.2017, 1 worker, det. & leg. Castro.

Beira Baixa, Guarda, Mt. Estrela, 6.ix.2017, 2♂, det. & leg. Castro.

Beira Baixa, Paços da Serra, 20-24.vii.1998, 3 workers, det. Castro, MNHNC (coll. Mendoça).

### **Genus *Vespa* Linnaeus, 1758**

2 species. Social species.

#### ***Vespa crabro* Linnaeus, 1758**

Widespread, scarce, 13 records.

DUSMET 1931: Agolada, 1♀; Buçaco, 1♂.

DINIZ 1959: Mitra, Vilela.

DINIZ 1978: Águeda, Amarante, Coimbra, Guimarães, Oliveira de Frades, Resende, S. Romão, Sobreiral, Tabuaço.

GROSSO-SILVA & SOARES-VIEIRA 2011: Porto, Avintes (Vila Nova de Gaia).

FERREIRA 2013: Guarda, Mangualde da Serra (Gouveia).  
Minho, Serra do Gerês, 3.viii.1979, 5 workers, *det.* Castro, *leg.* A. Serrano, MNHNC.  
Trás-os-Montes, Bragança, Franca, 20.vi.2016, field, *det.* Cross.  
Trás-os-Montes, Pardelhas, 29.viii.2018, field, *det.* Cross.  
Trás-os-Montes, Vila Real, 14.vi.2016, field, *det.* Cross.  
Douro Litoral, Amarante, Chapa, 19.vi.2016; 9.ix.2016 field, *det.* Cross.  
Beira Litoral, Fátima, 13.ix.1976, 7 workers, *det.* Castro, MNHNC, coll. Mendonça.  
Beira Alta, Guarda, 26.viii.2016, 1♀, *det.* Baldock, *leg.* S.Ferreira.  
Beira Alta, Manteigas, Poço do Inferno, 26.viii.2015, field *det.* A. Livory & R. Coulomb.  
Beira Alta, Paços da Serra, 6/9.vii.1980, 2 queens; Seia-Paços da Serra, 23.x.1970, 2♂; all *det.* Castro, MNHNC, coll. Mendonça.  
Beira Baixa, Alameda (Castelo Branco), 19.vii.2009, 1 worker, phot. P. Rodrigues (BV).  
Algarve, Vilarinha, 2.vi.2017, field, *det.* Cross.

### ***Vespa velutina* Lepeletier, 1836**

Northern & Central Portugal.

The number of unpublished records listed here (in the strict sense used in this list) is a poor indicator of the sheer extent and numbers of this invasive and rapidly expanding species. In this case, study by aculeate hymenopterists has been far out-stripped by general public interest. Refer to a website such as INIAV for an up to date distribution. It is now widespread and locally numerous in Northern & Central Portugal as far south as the Lisboa area.

GROSSO-SILVA & MAIA 2012: Viana do Castelo: Barroso, 10.ix.2011, 1 specimen, *leg.* P. Pereira (coll. J.M. Grosso-Silva); Nogueira, 3.xi.2011, several specimens, *leg.* J. Morais (all discarded); Torre, 10.ix.2011, 1 specimen, *leg.* N. Amaro (coll. M. Maia); 3.xi.2011, several specimens, *leg.* J. Felgueiras (all discarded). No mention is made of the sex/caste of the specimens.

INIAV 2020: A good number of records from the north of the country, mainly from the Viana do Castelo, Braga, Porto and Aveiro districts, with isolated records from those of Vila Real, Viseu, Guarda and Coimbra.

TAEGER 2018: Santarém, Mação; Castelo Branco, Sarzedas.

CARVALHO *et al.* 2020: The species is now found in an area representing 62% of Portugal (includes a distribution map).

Minho, Braga, 1.ix.2015, 1♂, phot. F.J. Martín (BV).

Minho, Braga, Ruivães, 16.v.2016, 2 queens *det.* & *leg.* Castro.

Douro Litoral, Amarante, Chapa, 9.ix.2016, 1♀; 30.viii.2018; *det.* & *leg.* Cross.

Beira Litoral, Aveiro, 8.viii.2015, 1♀, *det.* Baldock, *leg.* S. Ferreira.

### **Genus *Vespula* Thomson, 1869**

3 species. Social species. Interestingly, the sole social parasite of this genus, *Vespula austriaca* (Panzer, 1799), has not been recorded from Portugal.

### ***Vespula germanica* (Fabricius, 1793)**

Widespread, common, 65 records. (Fig. 32).

SAUNDERS 1881: (as *Vespa*) Monchique, Picota, 1880, 1♀; Sintra, 1880, 1♀.

DUSMET 1931: (as *Vespa*) Santarém, Buçaco, Évora, Mata de Leiria, Herdade da Mitra.

DINIZ 1959: (as *Vespa*) Buarcos, Coimbra, Soure, etc.

DINIZ 1978: Abrunhosa and a long list of other localities.

GROSSO-SILVA & SOARES-VIEIRA 2011: Porto, Avintes (Vila Nova de Gaia).

Trás-os-Montes, Douro Litoral, Beira Alta, Beira Baixa, Estremadura, Alto Alentejo, Baixo Alentejo, Algarve.

### ***Vespula rufa* (Linnaeus, 1758)**

Central Portugal, rare.

KUHLMANN 1996: (as *Paravespula*) Serra da Estrela, Vale do Zêzere, viii.1987, 1♀.

### ***Vespula vulgaris* (Linnaeus, 1758)**

Widespread, rare, 5 records.

BLÜTHGEN 1953A: (as *Paravespula*) Sintra, 30.vi.1935, 2 workers.

DINIZ 1959: (as *Vespa*) Mata de Leiria.

DINIZ 1978: Massorra, Resende, Serra do Gerês.

GROSSO-SILVA & SOARES-VIEIRA 2011: Porto, Avintes (Vila Nova de Gaia).

Minho, Braga, Barcelos, Gilmonde, 8.ix.2015, 1♀, *det.* Baldock, *leg.* R. Andrade.

Trás-os-Montes, Bragança, Mogadouro, 17.vi.2015, 1♀, *det.* Baldock, *leg.* S. Ferreira.

Trás-os-Montes, Portello-Montesinho road, 29.vi.2016, 1♀, *det.* & *leg.* Wood.

Beira Baixa, Guarda, Manteigas, 7.ix.2017, 1 worker, *det. & leg.* Castro.

Baixo Alentejo, Vila Nova de Milfontes, 20.ix.2014, 3♀, *det. & leg.* A. Livory & R. Coulomb.

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\* Reference available at [www.sea-entomologia.org](http://www.sea-entomologia.org)



**Plates / Láminas I-IV**

**Plate I. Sapygidae, Tiphidae, Bradynobaenidae, Scoliidae, Mutillidae**

**Fig. 1:** Male *Sapyga quinquepunctata*. Elsewhere in Europe this species is a parasitoid of *Osmia*, including species that nest in holes in wood and those that use empty snail shells. Unfortunately no host records are available for Portugal.

**Fig. 2:** Male *Pseudotiphia villosa*. In the spring this species can be locally abundant on Apiaceae such as *Smyrnum olusatrum*.

**Fig. 3:** Female *Gynecaptera bimaculata*. The only Portuguese representative of the family Bradynobaenidae. Hosts for the entire family are a bit of a mystery. Information on a single, atypical, Afrotropical species indicates that the larvae may be ectoparasitoids of Solifugae (Arachnida).

**Fig. 4:** Male *Dasyscolia ciliata*. An abundant spring species - the males are important pollinators of the Mirror Orchid, *Ophrys speculum*. The orchid flowers trick the males into attempted "pseudocopulation" by chemical, visual and tactile mimicry of the female wasps.

**Fig. 5:** Male *Megascolia maculata*. The two Portuguese *Megascolia* are giants and feature among the largest European Hymenoptera. Their larvae are parasitoids of larger dung beetles: the host of *M. maculata* is the Rhinoceros Beetle, *Oryctes nasicornis*.

**Fig. 6:** Female *Scolia hirta*. The most widespread and abundant of the late summer Scoliidae.

**Fig. 7:** Female *Tropidotilla litoralis*. Both sexes appear in the late summer/early autumn, with females numerous again in the spring.

**Fig. 8:** Male *Dasylabris atrata*. The most widespread and frequently recorded of the Portuguese *Dasylabris*.



## Plate II. Pompilidae

**Fig. 9:** Female *Ceropales variegata*. Easily recognised as the only one of the Portuguese *Ceropales* to have red on the metasoma. *Ceropales* are cleptoparasitoids of other Pompilidae but nothing is known of its precise host in Portugal.

**Fig. 10:** Female *Cryptocheilus octomaculatus*. The females are one of the largest Portuguese spider wasps. The males exist in two distinct forms: one with a rounded head like the female and one with an elongated head and prothorax.

**Fig. 11:** Female *Aporus planiceps*. Another Portuguese member of this genus, *Aporus unicolor*, is known to be a predator of the Purse-web spider (*Atypus*). So far, the prey of *A. planiceps* remains unknown.

**Fig. 12:** Male *Arachnospila holomelas*. *Arachnospila* is a large and difficult genus: the largest among the subfamily Pompilinae in Portugal. However, difficulties with identification means that none of the 10 species have more than a few records.

**Fig. 13:** Male *Batozonellus lacerticida*. Despite its fanciful specific name, which means “lizard killer”, *Batozonellus* are predators of the Wasp Spiders (*Argiope*). No detailed prey records are available for Portugal.

**Fig. 14:** Female *Entomobora fuscipennis*. *Entomobora* are predators of trap door spiders. The smooth, flat, chisel-shaped clypeus of the females is used to prise open the tightly-fitting trap doors of the spiders.

**Fig. 15:** Male *Eoferreola manticata*. Its congener, *Eoferreola rhombica*, is known to be a predator of ladybird spiders (*Eresus*). This is likely to be also true of *manticata* but, despite being sometimes locally numerous, nothing has been recorded of its prey in Portugal.

**Fig. 16:** Female *Schistonyx perezii*. A characteristic, and often frequent, species of coastal dunes.



### Plate III. Vespidae

**Fig. 17:** Female *Alastor atropos*. No Eumenine wasp has a tongue long enough to reach the bottom of the spur of *Linaria spartea*. To reach the nectar this female has to resort to “nectar robbing”: biting a hole at the tip of the spur through which it drinks.

**Fig. 18:** Male *Ancistrocerus biphaleratus*. The males of this species are the earliest of their genus to emerge in the spring.

**Fig. 19:** Male *Delta unguiculatum*. Its large size and distinctive colouration make this a readily recognised species.

**Fig. 20:** Female *Eumenes mediterraneus*. For many Eumenines, wet mud has a strong attraction for females, which require it for nest construction. Mud can become a scarce resource as the baking summer heat wears on, and puddles are a good place to see a range of species.

**Fig. 21:** Female *Euodynerus variegatus* (Spanish example). One of the more distinctive *Euodynerus*, this image of a female *E. variegatus* demonstrates the relative size of the wasp and its prey.

**Fig. 22:** Male *Leptochilus alpestris*. One of a number of small, black and white species in the subgenera *Lionotulus* and *Sarochilus* which can be mistaken for *Microdynerus* at a glance.

**Fig. 23:** Female *Microdynerus abdelkader*. A scarce but possibly under-recorded species, so far confined, in Portugal, to a handful of sites on the Portuguese coast.

**Fig. 24:** Female *Odynerus annulicornis*. Many *Odynerus* construct elaborate mud “chimney” entrances to their nests. The shape and construction is often a good guide to the species involved. It is not fully understood why these are made but deterrence of predators has been suggested as a reason. Perhaps the presence of this inquisitive ant may lend some support to this theory.



**Plate IV. Vespidae (cont.)**

**Fig. 25:** Female *Odynerus consobrinus*. The earliest *Odynerus* on the wing in Portugal: the first females can be found constructing nests as early as the last week in February.

**Fig. 26:** Female *Onychopterocheilus rectus* (Spanish example). The females belong to a small group of genera in which the labial palps are furnished with a long fringe of bristles forming an open basket. This may help them transport the loose, sandy material used in nest backfilling.

**Fig. 27:** Female *Pseudepipona herrichii* excavating nest. Wasps from the Iberian Peninsula are of the nominate subspecies: the females having pale yellow bands instead of the ivory bands of northern specimens.

**Fig. 28:** Female *Tropidodynerus flavus*. This female is demonstrating an unusual behaviour associated with *Tropidodynerus*, in which the stored beetle larvae prey are removed from the burrow for inspection, just before final nest closure. This may be a precaution against eggs of satellite flies, which are often a constant presence around active nests.

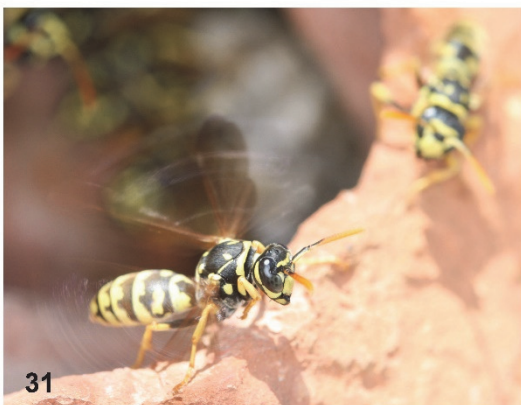
**Fig. 29:** Female *Ceramius bischoffi*. The most frequent and widespread Portuguese *Ceramius*. *Ceramius* build similar nests to *Odynerus*, an excellent example of convergent evolution.

**Fig. 30:** *Jugurtia dispar* mating pair. One of the "Pollen Wasps". There are virtually no pollen records for Portugal but, where floral associations have been noted, this species is consistently associated with *Pulicaria paludosa*.

**Fig. 31:** Worker *Polistes dominula* at nest entrance. Her wings are a blur of motion but not because she is about to take to flight. In the stifling heat of the Portuguese summer, nest ventilation can be critical and this worker is driving a stream of cool air deep into the nest.

**Fig. 32:** Worker *Vespula germanica*. A highly adaptable hunter, this worker is prepared to steal food wherever it finds it. Even if it means bringing her face to face with an even more formidable predator: a huge female Praying Mantis (*Mantis religiosa*).







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