

ADDITIONS TO THE FAUNA OF HEMIPTERA AND COLEOPTERA (INSECTA) OF SERRA DA ESTRELA NATURAL PARK (PORTUGAL)

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Abstract: This paper presents records of 30 species of Hemiptera and 111 species of Coleoptera new for the Serra da Estrela Natural Park (Portugal). Four of the species are recorded from Portugal for the first time: *Aelia cognata* Fieber, 1868 (Hemiptera), *Antherophagus pallens* (Fabricius, 1781), *Rhopalapion longirostre* (Olivier, 1807) and *Trichapion simile* (Kirby, 1811) (Coleoptera).

Keywords: Hemiptera, Coleoptera, Portugal, Serra da Estrela Natural Park, Pentatomidae, Cryptophagidae, Apionidae, new records.

Adiciones a la fauna de Hemiptera y Coleoptera (Insecta) del Parque Natural de Serra da Estrela (Portugal)

Resumen: Se presentan registros de 30 especies de Hemiptera y 111 especies de Coleoptera nuevas para el Parque Natural de Serra da Estrela (Portugal). Cuatro de las especies se registran de Portugal por la primera vez: *Aelia cognata* Fieber, 1868 (Hemiptera), *Antherophagus pallens* (Fabricius, 1781), *Rhopalapion longirostre* (Olivier, 1807) and *Trichapion simile* (Kirby, 1811) (Coleoptera).

Palabras-clave: Hemiptera, Coleoptera, Portugal, Parque Natural de Serra da Estrela, Pentatomidae, Cryptophagidae, Apionidae, novedades.

Introduction

Serra da Estrela Natural Park, the largest Portuguese protected area (101,060 ha), is located in the westernmost part of the central Iberian mountain chain. The Park includes the highest mountain of continental Portugal (*Serra da Estrela*), attaining 1991 metres above sea level in Torre, and its most characteristic part is the high plateau (*Planalto Central*) situated above 1500 m a.s.l.

The present contribution derives from a study of the invertebrate fauna of Serra da Estrela Natural Park which started in 2002 and whose main goals are the inventory, cartography and ecological characterization of the species that occur in this protected area. Some of the results obtained have already been included in a paper (Grosso-Silva, 2004) and presented in the form of posters at the 11th Iberian Entomology Congress that took place in Funchal (Madeira) in September 2004 (Grosso-Silva, 2004a, 2004c; Grosso-Silva & Ferreira, 2004; Sousa & Grosso-Silva, 2004) and at the Fifth Meeting of the Iberian Arachnology Group held at Murcia (Spain) in October 2004 (Sousa, 2004).

This study was preceded by another carried out by the author during 1998 and 1999 and by a period of more intermittent research that lasted from 2000 to 2002. In the first period mentioned (1998-99), a wide bibliographical survey was conducted in order to compile the data contained in previous studies (Grosso-Silva, 2000a). An altitudinal study of the ground beetle (Coleoptera, Carabidae) fauna of the Park was also carried out with the use of pitfall traps, allowing the collection of data on many more invertebrate groups. Furthermore, during this period different areas of the Park were investigated with various methodologies, resulting in a more thorough insight into the Park's fauna, both in terms of the species catalogue and their distribution. From the beginning of 2000 until the summer of 2002, the study of

the Park's fauna was done in a less strict way, relying mostly on the direct search for specimens in selected locations, coupled with the occasional application of light-trapping.

The purpose of this paper is to present records of species previously unknown from the Natural Park, obtained from the study of the Hemiptera and Coleoptera collected since 1998. Some of the results obtained for these two orders, including 29 additions to the catalogues of the Park's fauna (6 species of Hemiptera and 23 species of Coleoptera), have already been published by the author (Grosso-Silva, 2000b, 2002, 2003, 2004b; Grosso-Silva & Serrano, 2000) as well as by other researchers (Arnáiz *et al.*, 2002; Prieto *et al.*, 2002; Zapata & Sánchez-Ruiz, 2003). In the case of *Pentatoma rufipes* (Linnaeus, 1758) and *Ergates faber* (Linnaeus, 1761), which were included in an introductory chapter of a Portuguese butterfly field guide (Grosso-Silva, 2003), the records here presented, despite not being the first for the Park, are included because they are an important complement to the single locality cited for each of the species in that chapter.

A summary of the knowledge on the Hemiptera and Coleoptera of Serra da Estrela Natural Park

The compilation of the bibliographical data available for Serra da Estrela Natural Park has hitherto resulted, in terms of the Hemiptera and Coleoptera, in a list of 152 references (15 for Hemiptera, 135 for Coleoptera and 2 with data on both groups), to which 8 more have been added, including data from the fieldwork carried out since 1998 (1 for Hemiptera, 6 for Coleoptera and 1 with data on both groups).

In terms of the inventories, the data already amassed from the literature refers to nearly 130 species in the case of Hemiptera and to a figure close to 650 species regarding the Coleoptera. Similarly to what was discussed by Soares-Vieira & Grosso-Silva (2003) in a recent study of the beetle fauna of Peneda-Gerês National Park (North-western Portugal), it is not possible to define a precise species richness based on the literature because of unresolved synonymies and some doubtful records.

In the present paper 30 species of Hemiptera are recorded from the Park for the first time, which added with the 6 included in Grosso-Silva (2004), raise the Park's inventory to more than 160 species. The Coleoptera's inventory adds up to more than 780 species, with the 111 new species recorded here and the 23 published additions already mentioned.

List format

The records are presented in a list with the species arranged alphabetically within each family. The "Material examined" section includes the collecting data for each record: site code, date and specimen(s) information. The number of specimens collected is mentioned in parenthesis as is the number of specimens observed and identified in the field by the author, which are followed by the abbreviation "obs.". Unless otherwise stated, the specimens were collected by the author and are included in his private collection. A list of the 1x1 Km UTM coordinates for which the species are recorded is also included. The sites' names are presented in Table I.

Results

The data here presented refers to a total of 896 specimens, 656 of which were captured (Hemiptera: 194 in total, 125 captured; Coleoptera: 702 in total, 531 captured). With the previously mentioned exception of *Pentatoma rufipes* (Linnaeus, 1758) and *Ergates faber* (Linnaeus, 1761), all the species listed below are new for the Park's fauna: 30 in the case of Hemiptera and 111 in the case of Coleoptera. Furthermore, and according to the literature survey conducted, four of the species are considered first records for the Portuguese fauna: *Aelia cognata* Fieber, 1868 (Hemiptera), *Antherophagus pallens* (Fabricius, 1781), *Rhopalopion longirostre* (Olivier, 1807) and *Trichapion simile* (Kirby, 1811) (Coleoptera).

HEMIPTERA Linnaeus, 1758

BERYTIDAE Fieber, 1851

- *Berytinus (Lizinus) montivagus* (Meyer-Dür, 1841)
Material examined: **S-024**: 12-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1455.

CERCOPIDAE Leach, 1815

- *Cercopis sanguinolenta* (Scopoli, 1763)
Material examined: **S-006**: 26-05-2004 (1 obs.); **S-021**: 03-06-2004 (1 obs.); **S-024**: 12-05-2004 (3 obs.); **S-039**: 13-05-2004 (2 obs.); **S-043**: 11-05-2004 (1 obs.); **S-054**: 27-05-2004 (10 obs.); **S-057**: 27-05-2004 (3 obs.); **S-061**: 25-05-2004 (5 obs.); **S-064**: 26-05-2004 (3 obs.); **S-068**: 14-06-2001 (1); **S-080**: 24-05-2004 (4 obs.); **S-089**: 12-07-2004 (1 obs.); **S-092**: 03-06-2004 (1 obs.); **S-116**: 01-06-2004 (3 obs.).

UTM (1x1 Km): 29TPE1455, 29TPE2064, 29TPE2268, 29TPE2371, 29TPE2575, 29TPE2670, 29TPE2771, 29TPE2080, 29TPE2586, 29TPE3377, 29TPE3785, 29TPE3885, 29TPE3886, 29TPE3892.

- *Haematoloma dorsatum* (Ahrens, 1812)
Material examined: **S-022**: 12-07-2004 (1 obs.); **S-039**: 13-05-2004 (1 obs.); **S-079**: 25-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2165, 29TPE2263, 29TPE2586.

COREIDAE Leach, 1815

- *Bothrostethus annulipes* (Costa, 1843)
Material examined: **S-103**: 22-07-1999 (1).
UTM (1x1 Km): 29TPE2166.
- *Centrocoris spiniger* (Fabricius, 1803)
Material examined: **S-024**: 12-05-2004 (1; CIBIO/UP col.); **S-030**: 27-07-2004 (2; CIBIO/UP col.); **S-037**: 29-07-2004 (1; CIBIO/UP col.); **S-038**: 29-07-2004 (1; CIBIO/UP col.); **S-052**: 26-05-2004 (4; CIBIO/UP col.); **S-085**: 28-06-1999 (1); **S-133**: 14-07-2004 (2; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1059, 29TPE1455, 29TPE2868, 29TPE2473, 29TPE2187, 29TPE2188, 29TPE4292.
- *Centrocoris variegatus* Kolenati, 1845
Material examined: **S-102**: 23-07-1999 (1).
UTM (1x1 Km): 29TPE3175.
- *Gonocerus acuteangulatus* (Goeze, 1778)
Material examined: **S-036**: 02-06-2004 (1; CIBIO/UP col.); **S-064**: 26-05-2004 (1; CIBIO/UP col.); **S-067**: 15-07-2004 (1; CIBIO/UP col.); **S-080**: 27-08-1999 (1).
UTM (1x1 Km): 29TPE1682, 29TPE2569, 29TPE2371, 29TPE3785.
- *Gonocerus insidiator* (Fabricius, 1787)
Material examined: **S-136**: 10-12-1998 (1).
UTM (1x1 Km): 29TPE0970.
- *Phyllomorpha laciniata* (Villers, 1789)
Material examined: **S-018**: 22-06-2004 (1, Pedro Sousa leg.; CIBIO/UP col.); **S-057**: 27-05-2004 (1, Martin Corley leg.; CIBIO/UP col.); **S-061**: 03-09-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1864, 29TPE3377, 29TPE3886.
- *Prionotylus brevicornis* (Mulsant & Rey, 1852)
Material examined: **S-030**: 27-07-2004 [3; CIBIO/UP col. (2)]; **S-038**: 29-07-2004 (3; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2868, 29TPE2188.

HYDROMETRIDAE Billberg, 1820

- *Hydrometra stagnorum* (Linnaeus, 1758)
Material examined: **S-058**: 29-07-2004 (1 obs.); **S-064**: 26-05-2004 (1 obs.); **S-080**: 03-09-2003 (1 obs.); **S-136**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0970, 29TPE2371, 29TPE3585, 29TPE3785.

MEMBRACIDAE Rafinesque, 1815

- *Centrotus chloroticus* Fairmaire, 1851
Material examined: **S-061**: 14-08-2003 (1; CIBIO/UP col.); **S-068**: 16-08-2000 (1, João Rodrigues leg.), 18-08-2000 (1, João Rodrigues leg.), 20-08-2001 (1); **S-074**: 17-08-2000 (1).
UTM (1x1 Km): 29TPE2268, 29TPE2374, 29TPE3377.
- *Stictocephala alta* (Walker, 1851)
Material examined: **S-081**: 07-10-1998 (1); **S-121**: 14-10-1999 (1).
UTM (1x1 Km): 29TPE0664, 29TPE2573.

NABIDAE A. Costa, 1853

- *Prostemma guttula* (Fabricius, 1787)
Material examined: **S-044**: 13-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2787.

NEPIDAE Latreille, 1802

- *Nepa cinerea* Linnaeus, 1758
Material examined: **S-061**: 03-09-2003 (1, Carlos Resende & Grosso-Silva leg.; CIBIO/UP col.); **S-063**: 03-09-2003 (1 obs.).
UTM (1x1 Km): 29TPE3377, 29TPE3482.

PENTATOMIDAE Leach, 1815

- *Aelia acuminata* (Linnaeus, 1758)
Material examined: **S-030**: 27-07-2004 (1; CIBIO/UP col.); **S-032**: 28-07-2004 (1; CIBIO/UP col.); **S-039**: 13-05-2004 (1; CIBIO/UP col.); **S-044**: 29-07-2004 (1 obs.); **S-045**: 13-07-2004 (1; CIBIO/UP col.); **S-051**: 24-07-1999 (1); **S-054**: 27-05-2004 (2; CIBIO/UP col.); **S-057**: 27-05-2004 (1; CIBIO/UP col.); **S-079**: 27-07-2004 (1; CIBIO/UP col.); **S-114**: 15-07-2004 (1 obs.); **S-126**: 13-07-2004 (1; CIBIO/UP col.); **S-133**: 14-07-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1059, 29TPE1367, 29TPE1974, 29TPE2165, 29TPE2567, 29TPE2868, 29TPE2084, 29TPE2586, 29TPE2787, 29TPE3885, 29TPE3886, 29TPE3984.
- *Aelia cognata* Fieber, 1868
Material examined: **S-010**: 29-07-2004 (1; CIBIO/UP col.); **S-024**: 12-05-2004 (1; CIBIO/UP col.); **S-030**: 27-07-2004 (2; CIBIO/UP col.); **S-032**: 28-07-2004 (1; CIBIO/UP col.); **S-038**: 29-07-2004 (1; CIBIO/UP col.); **S-044**: 29-07-2004 (1; CIBIO/UP col.); **S-046**: 18-08-2001 (1); **S-052**: 26-05-2004 (1; CIBIO/UP col.); **S-057**: 27-05-2004 (1; CIBIO/UP col.); **S-061**: 25-05-2004 (1; CIBIO/UP col.); **S-068**: 29-06-2001 (1); **S-114**: 15-07-2004 (1; CIBIO/UP col.); **S-120**: 28-07-2004 (2; CIBIO/UP col.); **S-133**: 14-07-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1059, 29TPE1455, 29TPE1275, 29TPE2268, 29TPE2567, 29TPE2868, 29TPE2175, 29TPE2084, 29TPE2188, 29TPE2787, 29TPE3377, 29TPE3886, 29TPE3391, 29TPE4292.
Comments: New species for the Portuguese fauna.
- *Arma custos* (Fabricius, 1794)
Material examined: **S-074**: 09-12-1998 (4), 19-12-1998 (1); **S-138**: 10-12-1998 (1).
UTM (1x1 Km): 29TPE0970, 29TPE2374.
- *Eurydema fieberi* Schummel & Fieber, 1837
Material examined: **S-094**: 13-07-2004 [3; CIBIO/UP col. (2)].
UTM (1x1 Km): 29TPE2275.
- *Jalla dumosa* (Linnaeus, 1758)
Material examined: **S-071**: 11-03-2001 (1); **S-106**: 18-04-2001 (1).
UTM (1x1 Km): 29TPE2268, 29TPE2467.
- *Neottiglossa leporina* (Herrich-Schäffer, 1830)
Material examined: **S-032**: 28-07-2004 (2; CIBIO/UP col.); **S-054**: 27-05-2004 (2; CIBIO/UP col.); **S-057**: 27-05-2004 (2; CIBIO/UP col.); **S-070**: 26-07-2004 (2; CIBIO/UP col.); **S-120**: 28-07-2004 (1; CIBIO/UP col.); **S-133**: 14-07-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1059, 29TPE1275, 29TPE2466, 29TPE2084, 29TPE3885, 29TPE3886.
- *Nezara viridula* (Linnaeus, 1758)
Material examined: **S-030**: 27-07-2004 (1; CIBIO/UP col.); **S-080**: 06-09-2001 (1, Martin Corley leg.), 03-09-2003 (1 obs.); **S-085**: 22-08-2001 (4).
UTM (1x1 Km): 29TPE2868, 29TPE2371, 29TPE2473.
- *Pentatoma rufipes* (Linnaeus, 1758)
Material examined: **S-034**: 25-07-1999 (1); **S-045**: 13-07-2004 (1 obs.); **S-059**: 09-10-1998 (1); **S-072**: 22-07-1999 (13); **S-074**: 08-09-2001 (2 obs.); **S-080**: 03-09-2003 (1 obs.); **S-091**: 25-07-1999 (1 obs.); **S-101**: 24-07-1999 (1), 09-09-2001 (1 obs.).
UTM (1x1 Km): 29TPE1974, 29TPE2165, 29TPE2371, 29TPE2374, 29TPE2471, 29TPE2570, 29TPE3683.
- *Pitedia juniperina* (Linnaeus, 1758)
Material examined: **S-139**: 11-05-1999 (1, on *Juniperus communis*).
UTM (1x1 Km): 29TPE1467.
- *Podops (Petalodera) dilatata* Fieber & Puton, 1873
Material examined: **S-135**: 24-05-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160.
- *Stollia inconspicuum* (Herrich-Schäffer, 1844)
Material examined: **S-004**: 30-07-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE3190.

REDUVIIDAE Latreille, 1807

- *Reduvius personatus* (Linnaeus, 1758)
Material examined: **S-112**: 22-06-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2372.
- *Rhinocoris cuspidatus* Ribaut, 1921
Material examined: **S-083**: 26-07-2004 (1 obs.); **S-108**: 30-07-2004 (1; CIBIO/UP col.); **S-109**: 25-05-2004 (1; CIBIO/UP col.); **S-140**: 12-05-2004 (2; CIBIO/UP col.).
UTM (1x1 Km): 29TPE0655, 29TPE2268, 29TPE2366, 29TPE3176.

RHOPALIDAE Amyot & Serville, 1843

- *Brachycarenum tigrinus* (Schilling, 1829)
Material examined: **S-008**: 13-05-2004 (1; CIBIO/UP col.); **S-064**: 30-07-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2890, 29TPE3785.
- *Chorosoma schillingi* (Schummel, 1829)
Material examined: **S-003**: 03-09-2003 (1 obs.); **S-010**: 29-07-2004 (1 obs.); **S-038**: 29-07-2004 (1 obs.); **S-061**: 14-08-2003 (1; CIBIO/UP col.), 03-09-2003 (1 obs.); **S-069**: 02-09-2003 (1; CIBIO/UP col.); **S-070**: 02-09-2003 (1; CIBIO/UP col.); **S-114**: 15-07-2004 (1 obs.); **S-118**: 26-07-2004 (1 obs.); **S-119**: 13-07-2004 (1 obs.); **S-120**: 28-07-2004 (1 obs.); **S-126**: 13-07-2004 (1 obs.); **S-130**: 31-07-2003 (1, André Rodrigues leg.; CIBIO/UP col.); **S-131**: 22-06-2004 (1 obs.); **S-133**: 14-07-2004 (1; CIBIO/UP col.); **S-137**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0966, 29TPE1059, 29TPE1367, 29TPE1275, 29TPE1472, 29TPE1473, 29TPE1573, 29TPE2064, 29TPE2367, 29TPE2466, 29TPE2567, 29TPE2188, 29TPE3377, 29TPE3391, 29TPE3893.

COLEOPTERA Linnaeus, 1758

CARABIDAE Latreille, 1802

- *Astigis salzmanni* (Germar, 1824)
Material examined: **S-030**: 15-06-1999 (1).
UTM (1x1 Km): 29TPE2868.

DYTISCIDAE Leach, 1815

- *Colymbetes fuscus* (Linnaeus, 1758)
Material examined: **S-137**: 27-08-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE0966.

HISTERIDAE Gyllenhal, 1808

- *Cylistix filiforme* (Erichson, 1834)
Material examined: **S-012**: 25-01-1999 (1, Juan de Ferrer det.); **S-096**: 17-06-1999 (2, Juan de Ferrer det.); **S-121**: 12-05-1999 (1, Juan de Ferrer det.).
UTM (1x1 Km): 29TPE0664, 29TPE2369, 29TPE3593.
- *Cylistix lineare* (Erichson, 1834)
Material examined: **S-115**: 19-02-1999 (4, Juan de Ferrer det.).
UTM (1x1 Km): 29TPE2267.
- *Saprinus (Saprinus) detersus* (Illiger, 1807)
Material examined: **S-096**: 28-07-1999 (3, Juan de Ferrer det.).
UTM (1x1 Km): 29TPE2269.
- *Saprinus (Saprinus) furvus* Erichson, 1834
Material examined: **S-096**: 28-07-1999 (1, Juan de Ferrer det.).
UTM (1x1 Km): 29TPE2269.
- *Saprinus (Saprinus) subnitescens* Bickhardt, 1909
Material examined: **S-096**: 28-07-1999 (9, Juan de Ferrer det.).
UTM (1x1 Km): 29TPE2269.

SCYDMAENIDAE Leach, 1815

- *Palaeostigus palpalis* (Latreille, 1804)
Material examined: **S-121**: 13-04-1999 (1).
UTM (1x1 Km): 29TPE0664.
- *Palaeostigus prolongatus* (Gory, 1839)
Material examined: **S-122**: 23-04-1999 (14); **S-135**: 24-05-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE1172.

SILPHIDAE Latreille, 1807

- *Nicrophorus vestigator* Herschel, 1807
Material examined: **S-060**: 24-05-2001 (2); **S-064**: 27-05-2004 (1; CIBIO/UP col.); **S-068**: 09-08-2000 (2); **S-085**: 16-05-2001 (2); **S-104**: 01-09-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2267, 29TPE2268, 29TPE2473, 29TPE3779, 29TPE3785.
- *Thanatophilus rugosus* (Linnaeus, 1758)
Material examined: **S-064**: 27-05-2004 (2; CIBIO/UP col.); **S-065**: 30-05-2001 (1); **S-068**: 09-08-2000 (1).
UTM (1x1 Km): 29TPE2268, 29TPE3785, 29TPE3985.

STAPHYLINIDAE Latreille, 1802

- *Ontholestes murinus* (Linnaeus, 1758)
Material examined: **S-072**: 22-07-1999 (1).
UTM (1x1 Km): 29TPE2165.

APHODIIDAE Leach, 1815

- *Ammoecius lusitanicus* Erichson, 1848
Material examined: **S-123**: 12-05-1999 (1, Jacinto Diamantino leg., Tristão Branco det.).
UTM (1x1 Km): 29TPE1569.
- *Anomius annamariae* Baraud, 1982
Material examined: **S-018**: 04-09-2001 (1, Tristão Branco det.); **S-085**: 23-08-2001 (2, Tristão Branco det.).
UTM (1x1 Km): 29TPE1864, 29TPE2473.
- *Liothorax plagiatus* (Linnaeus, 1767)
Material examined: **S-123**: 12-05-1999 (1, Jacinto Diamantino leg., Tristão Branco det.).
UTM (1x1 Km): 29TPE1569.
- *Nimbus affinis* (Panzer, 1823)
Material examined: **S-078**: 09-10-1998 (2, Tristão Branco det.).
UTM (1x1 Km): 29TPE2376.
- *Nimbus contaminatus* (Panzer, 1823)
Material examined: **S-085**: 13-10-2001 (2, Tristão Branco det.).
UTM (1x1 Km): 29TPE2473.

CETONIIDAE Leach, 1815

- *Oxythyrea funesta* (Poda, 1761)
Material examined: **S-024**: 12-05-2004 (2 obs.); **S-033**: 30-05-2001 (4 obs.); **S-035**: 13-05-2004 (1 obs.); **S-040**: 13-05-2004 (2 obs.); **S-052**: 26-05-2004 (1 obs.); **S-054**: 27-05-2004 (1 obs.); **S-056**: 26-07-2000 (1 obs.); **S-060**: 24-05-2001 (1); **S-066**: 30-05-2001 (3 obs.); **S-080**: 24-05-2004 (2 obs.); **S-081**: 08-08-2000 (4, Clotilde Soares leg.).
UTM (1x1 Km): 29TPE1455, 29TPE1981, 29TPE2371, 29TPE2573, 29TPE2788, 29TPE2889, 29TPE3779, 29TPE3582, 29TPE3686, 29TPE3885, 29TPE4292.
- *Protaetia cuprea* (Fabricius, 1775)
Material examined: **S-081**: 20-06-2000 (1, Clotilde Soares leg.); **S-085**: 15-03-2001 (1).
UTM (1x1 Km): 29TPE2473, 29TPE2573.
- *Protaetia morio* (Fabricius, 1781)
Material examined: **S-121**: 20-07-1999 (1, Tristão Branco det.); **S-135**: 12-06-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE0764, 29TPE1160.
- *Protaetia oblonga* (Gory & Percheron, 1833)
Material examined: **S-016**: 15-07-1996 (3, Jacinto Diamantino leg., Tristão Branco det.); **S-068**: 29-07-2003 (1; CIBIO/UP col.); **S-075**: 28-06-2001 (1).
UTM (1x1 Km): 29TPE1560, 29TPE2268, 29TPE2375.

GEOTRUPIDAE Latreille, 1802

- *Sericotrupes niger* (Marsham, 1802)
Material examined: **S-016**: 15-07-1996 (1, Jacinto Diamantino leg., Tristão Branco det.); **S-080**: 06-09-2001 (1, Tristão Branco det.).
UTM (1x1 Km): 29TPE1560, 29TPE2371.

LUCANIDAE Latreille, 1804

- *Dorcus parallelipipedus* (Linnaeus, 1758)
Material examined: **S-080**: 17-06-1999 (1); **S-112**: 22-06-2004 (1 obs.); **S-135**: 12-06-1999 (1, Jacinto Diamantino leg.), 23-08-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE2371, 29TPE2372.
- *Lucanus cervus* (Linnaeus, 1758)
Material examined: **S-136**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0970.
Comments: The data on the Portuguese distribution of this protected species was compiled by GROSSO-SILVA (1999). In Serra da Estrela Natural Park the species appears to be very scarce, having been found only once in over six years of fieldwork.

MELOLONTHIDAE MacLeay, 1819

- *Triodontella castillana* (Baraud, 1961)
Material examined: **S-074**: 25-07-1999 (8, Tristão Branco det.).
UTM (1x1 Km): 29TPE2374.

SCARABAEIDAE Latreille, 1802

- *Onthophagus (Parentius) punctatus* (Illiger, 1803)
Material examined: **S-068**: 15-07-2000 (1); **S-123**: 12-05-1999 (1, Jacinto Diamantino leg., Tristão Branco det.).
UTM (1x1 Km): 29TPE1569, 29TPE2268.
- *Scarabaeus (Ateuchetus) laticollis* Linnaeus, 1767
Material examined: **S-055**: 26-03-2004 (1, Pedro Sousa leg.; CIBIO/UP col.); **S-060**: 24-05-2001 (2 + 1 obs.).
UTM (1x1 Km): 29TPE3779, 29TPE3883.

BUPRESTIDAE Leach, 1815

- *Acmaeodera (Acmaeodera) pilosellae* (Bonelli, 1812) ssp. *pilosellae* s. str.
Material examined: **S-086**: 03-06-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2671.
Comments: This species was recently found in Portugal, in Portagem (Marvão) (ZUZARTE *et al.*, 2003) and the present record represents the second locality known in the country.
- *Acmaeodera (Acmaeotethya) degener* (Scopoli, 1763) ssp. *quattuordecimpunctata* (Villers, 1789)
Material examined: **S-102**: 23-07-1999 (1, Soares-Vieira leg.).
UTM (1x1 Km): 29TPE3175.
- *Anthaxia (Anthaxia) dimidiata* (Thunberg, 1789)
Material examined: **S-068**: 30-06-2001 (1); **S-121**: 20-07-1999 (2).
UTM (1x1 Km): 29TPE0764, 29TPE2268.
- *Anthaxia (Cratomerus) hungarica* (Scopoli, 1772)
Material examined: **S-040**: 13-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2788.
- *Anthaxia (Haplantaxia) millefolii* (Fabricius, 1801)
Material examined: **S-056**: 26-07-2000 (1).
UTM (1x1 Km): 29TPE3582.
- *Buprestis (Buprestis) novemmaculata* Linnaeus, 1758
Material examined: **S-017**: 15-07-2000 (1, Soares-Vieira leg.); **S-068**: 15-07-2000 (4), 16-07-2000 (1), 19-07-2000 (1), 31-07-2000 (4), 09-08-2000 (1).
UTM (1x1 Km): 29TPE2268, 29TPE2771.
- *Chalcophora mariana* (Linnaeus, 1758) ssp. *massiliensis* (Villers, 1789)
Material examined: **S-020**: 04-06-2004 (1 obs.); **S-023**: 03-06-2004 (1 obs.); **S-068**: 29-06-2000 (1), 15-07-2000 (1), 31-07-2000 (2); **S-085**: 27-06-1999 (1, José Paulo Pires leg.); **S-085**: 12-06-2000 (1 obs.); **S-107**: 24-05-2001 (1 obs.); **S-121**: 20-07-1999 (1); **S-133**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0764, 29TPE1059, 29TPE2268, 29TPE2868, 29TPE2473, 29TPE2574, 29TPE2971.
- *Melanophila acuminata* (De Geer, 1774)
Material examined: **S-085**: 20-06-2001 (1), 04-09-2001 (1).
UTM (1x1 Km): 29TPE2473.

- *Phaenops cyaneus* (Fabricius, 1775)
Material examined: **S-068**: 15-07-2000 (1), 31-07-2000 (2), 08-08-2000 (2).
UTM (1x1 Km): 29TPE2268.
- *Ptosima flavoguttata* (Illiger, 1803)
Material examined: **S-044**: 13-05-2004 (1, Pedro Sousa leg.; CIBIO/UP col.); **S-050**: 26-07-2000 (1).
UTM (1x1 Km): 29TPE2787, 29TPE3983.

LAMPYRIDAE Latreille, 1817

- *Lamprohiza paulinoi* E. Olivier, 1884
Material examined: **S-080**: 17-06-1999 (3), 21-06-2004 (1 + 2 obs.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2371.

BOSTRICHIDAE Latreille, 1802

- *Bostrichus capucinus* (Linnaeus, 1758)
Material examined: **S-127**: 09-08-2000 (1).
UTM (1x1 Km): 29TPE1469.
- *Stephanopachys quadricollis* (Marseul, 1879)
Material examined: **S-096**: 17-06-1999 (1).
UTM (1x1 Km): 29TPE2369.
- *Xylopertha praeusta* (Germar, 1817)
Material examined: **S-032**: 21-06-2001 (1).
UTM (1x1 Km): 29TPE2084.

DERMESTIDAE Latreille, 1802

- *Attagenus unicolor* (Brahm, 1791)
Material examined: **S-085**: 30-06-2001 (25).
UTM (1x1 Km): 29TPE2473.
- *Dermestes (Dermestinus) frischii* Kugelann, 1792
Material examined: **S-048**: 30-07-2003 (2; CIBIO/UP col.); **S-064**: 27-05-2004 (1; CIBIO/UP col.); **S-068**: 09-08-2000 (6); **S-074**: 12-05-1999 (1); **S-096**: 30-07-1999 (1); **S-121**: 28-06-1999 (4).
UTM (1x1 Km): 29TPE0664, 29TPE2268, 29TPE2269, 29TPE2374, 29TPE3688, 29TPE3785.
- *Dermestes (Dermestinus) mustelinus* Erichson, 1846
Material examined: **S-052**: 26-05-2004 (1, Pedro Sousa leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE4292.
- *Dermestes (Dermestinus) undulatus* Brahm, 1790
Material examined: **S-048**: 30-07-2003 (1; CIBIO/UP col.); **S-064**: 27-05-2004 (3; CIBIO/UP col.); **S-068**: 09-08-2000 (2); **S-074**: 12-05-1999 [40 + 60 obs.; A. Serrano col. (4)]; **S-080**: 17-06-1999 (4); **S-096**: 28-07-1999 (5), 30-07-1999 (11).
UTM (1x1 Km): 29TPE2268, 29TPE2269, 29TPE2371, 29TPE2374, 29TPE3688, 29TPE3785.

ACANTHOCNEMIDAE Crowson, 1964

- *Acanthocnemus nigricans* (Hope, 1845)
Material examined: **S-061**: 03-09-2003 (1, Carlos Resende leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE3377.

CLERIDAE Latreille, 1802

- *Opilo domesticus* (Sturm, 1837)
Material examined: **S-074**: 08-09-2001 (1); **S-085**: 22-08-2001 (1); **S-101**: 09-09-2001 (1).
UTM (1x1 Km): 29TPE2374, 29TPE2473, 29TPE2570.
- *Thanasimus formicarius* (Linnaeus, 1758)
Material examined: **S-040**: 13-05-2004 (1 obs.); **S-076**: 11-05-2004 (1 + 2 obs.; CIBIO/UP col.); **S-096**: 17-06-1999 (12); **S-124**: 10-12-1998 (2).
UTM (1x1 Km): 29TPE0970, 29TPE2065, 29TPE2369, 29TPE2788.
- *Trichodes octopunctatus* (Fabricius, 1787)
Material examined: **S-040**: 13-05-2004 (1 obs.); **S-064**: 26-05-2004 (1 obs.); **S-080**: 18-06-1999 (1); **S-121**: 20-07-1999 (2 obs.).
UTM (1x1 Km): 29TPE0764, 29TPE2371, 29TPE2788, 29TPE3785.

PRIONOCERIDAE Lacordaire, 1857

- *Lobonyx aeneus* (Fabricius, 1787)
Material examined: **S-086**: 03-06-2004 (1; CIBIO/UP col.); **S-097**: 04-06-2004 (1; CIBIO/UP col.); **S-109**: 25-05-2004 (1; CIBIO/UP col.); **S-113**: 21-05-2001 (1).
UTM (1x1 Km): 29TPE2671, 29TPE3173, 29TPE3176, 29TPE3476.

TROGOSSITIDAE Latreille, 1802

- *Temnoscheila coerulea* (Olivier, 1790)
Material examined: **S-025**: 22-07-1999 (1); **S-028**: 08-10-1998 [16, Grosso-Silva & José Paulo Pires leg.; A. Serrano col. (2), Juan de Ferrer col. (2)]; **S-068**: 01-08-2000 (1); **S-096**: 17-06-1999 (2); **S-113**: 21-05-2001 (1 obs.).
UTM (1x1 Km): 29TPE1356, 29TPE2268, 29TPE2369, 29TPE3171, 29TPE3476.

COCCINELLIDAE Latreille, 1807

- *Chilocorus bipustulatus* (Linnaeus, 1758)
Material examined: **S-110**: 22-05-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1865.
- *Exochomus (Exochomus) nigromaculatus* (Goeze, 1777)
Material examined: **S-063**: 03-09-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE3482.
- *Neomysia oblongoguttata* (Linnaeus, 1758)
Material examined: **S-074**: 08-09-2001 (1, Alison Corley leg.); **S-077**: 27-07-1999 (1); **S-101**: 09-09-2001 (1).
UTM (1x1 Km): 29TPE2374, 29TPE2570, 29TPE2577.
- *Propylea quatuordecimpunctata* (Linnaeus, 1758)
Material examined: **S-054**: 27-05-2004 (2 obs.); **S-137**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0966, 29TPE3885.
- *Rodolia cardinalis* (Mulsant, 1850)
Material examined: **S-085**: 06-09-2001 (1), 24-09-2001 (1), 24-10-2001 (1); **S-123**: 12-05-1999 (1, Jacinto Diamantino leg.); **S-141**: 27-10-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE0767, 29TPE1569, 29TPE2473.
- *Sospita vigintiguttata* (Linnaeus, 1758)
Material examined: **S-064**: 05-09-2001 (2).
UTM (1x1 Km): 29TPE3785.
- *Thea vigintiduopunctata* (Linnaeus, 1758)
Material examined: **S-054**: 27-05-2004 (3 obs.); **S-084**: 27-05-2004 (1 obs.); **S-085**: 22-08-2001 (1); **S-136**: 29-07-1999 (1 obs.).
UTM (1x1 Km): 29TPE0970, 29TPE2373, 29TPE2473, 29TPE3885.

CRYPTOPHAGIDAE Kirby, 1837

- *Antherophagus pallens* (Fabricius, 1781)
Material examined: **S-039**: 13-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2586.
Comments: New genus for the Portuguese fauna. The collection of this species in Serra da Estrela is very interesting as it was only recorded from the Pyrenees and Sierra Nevada in the recent revision of the Iberian fauna of *Antherophagus* Dejean, 1821 (OTERO *et al.*, 1998).

ENDOMYCHIDAE Leach, 1815

- *Lycoperdina bovistae* (Fabricius, 1792)
Material examined: **S-074**: 16-05-1999 (2), 24-06-1999 (6), 20-11-1999 (1).
UTM (1x1 Km): 29TPE2374.
Comments: All the specimens were collected with pitfall traps.

MELOIDAE Gyllenhal, 1810

- *Lytta (Lytta) vesicatoria* (Linnaeus, 1758)
Material examined: **S-057**: 27-05-2004 (1; CIBIO/UP col.); **S-107**: 24-05-2001 (1 obs.); **S-137**: 19-05-2002 (1 obs.).
UTM (1x1 Km): 29TPE0966, 29TPE2574, 29TPE3886.

- *Sitaris (Sitaris) solieri* Pecchioli, 1839
Material examined: **S-085**: 21-08-2001 (1), 22-08-2001 (4, Grosso-Silva & Sónia Ferreira leg.), 30-08-2001 (13), 06-09-2001 (1).
UTM (1x1 Km): 29TPE2473.

MYCTERIDAE Mulsant, 1859

- *Mycterus (Mycterus) curculioides* (Fabricius, 1781)
Material examined: **S-007**: 26-05-2004 (3 obs.); **S-026**: 03-06-2004 (1 obs.); **S-030**: 15-06-1999 [17; Juan de Ferrer col. (4)]; **S-033**: 30-05-2001 (1); **S-042**: 19-05-2002 (5 obs.); **S-080**: 18-06-1999 (1); **S-113**: 21-05-2001 (1); **S-121**: 20-07-1999 (1).
UTM (1x1 Km): 29TPE0764, 29TPE1383, 29TPE2868, 29TPE2371, 29TPE2770, 29TPE2889, 29TPE3476, 29TPE3894.

OEDEMERIDAE Latreille, 1810

- *Chrysanthia reitteri* Seidlitz, 1899
Material examined: **S-013**: 12-06-1997 (1, Jacinto Diamantino leg.); **S-135**: 11-07-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE1560.
- *Chrysanthia superba* Reitter, 1872
Material examined: **S-123**: 12-05-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1569.
- *Ischnomera xanthoderes* (Mulsant, 1850)
Material examined: **S-080**: 20-05-1999 (1).
UTM (1x1 Km): 29TPE2371.
- *Oedemera (Oedemera) nobilis* (Scopoli, 1763)
Material examined: **S-085**: 17-06-1999 (1); **S-119**: 22-06-2004 (1, Pedro Sousa leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1473, 29TPE2473.
- *Oedemera (Oedemera) unicolor* Schmidt, 1846
Material examined: **S-109**: 25-05-2004 (1).
UTM (1x1 Km): 29TPE3176.

TENEBRIONIDAE Latreille, 1802

- *Lagria lata* Fabricius, 1801
Material examined: **S-103**: 22-07-1999 (1).
UTM (1x1 Km): 29TPE2166.
- *Lagria rubida* Graëlls, 1855
Material examined: **S-068**: 29-06-2001 (2); **S-074**: 21-07-1999 (2); **S-103**: 22-07-1999 (1).
UTM (1x1 Km): 29TPE2166, 29TPE2268, 29TPE2374.

CERAMBYCIDAE Latreille, 1802

- *Aegomorphus varius* (Fabricius, 1787)
Material examined: **S-136**: 14-07-2004 (1, Pedro Sousa leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE0970.
- *Agapanthia annularis* (Olivier, 1795)
Material examined: **S-033**: 30-05-2001 (1); **S-040**: 13-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2788, 29TPE2889.
- *Agapanthia asphodeli* (Latreille, 1804)
Material examined: **S-137**: 19-05-2002 (1).
UTM (1x1 Km): 29TPE0966.
- *Arhopalus ferus* (Mulsant, 1839)
Material examined: **S-028**: 08-10-1998 [10; Juan de Ferrer col. (1)]; **S-080**: 03-09-2003 (1 obs.), 26-07-2004 (1 obs.); **S-127**: 23-07-1999 (1); **S-134**: 29-07-1999 (1); **S-135**: 11-08-1999 (1, Jacinto Diamantino leg.), 17-08-1999 (1 obs.), 23-08-1999 (1, Jacinto Diamantino leg.), 11-09-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE0871, 29TPE1356, 29TPE1160, 29TPE1469, 29TPE2371.
- *Calamobius filum* (Rossi, 1790)
Material examined: **S-024**: 12-05-2004 (2; CIBIO/UP col.); **S-035**: 13-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1455, 29TPE1981.

- *Chlorophorus pilosus* (Forster, 1771)
Material examined: **S-068**: 31-07-2000 (1).
UTM (1x1 Km): 29TPE2268.
- *Cribroleptura stragulata* (Germar, 1824)
Material examined: **S-014**: 04-06-2004 (1 obs.); **S-019**: 04-06-2004 (1 obs.); **S-033**: 30-05-2001 (1); **S-077**: 27-07-1999 (1 obs.); **S-091**: 25-07-1999 (1 obs.); **S-102**: 23-07-1999 (3); **S-103**: 22-07-1999 (1); **S-105**: 17-06-1999 (2); **S-121**: 16-06-1999 (2), 20-07-1999 (1); **S-130**: 31-07-2003 (1 obs.); **S-133**: 14-07-2004 (1; CIBIO/UP col.); **S-135**: 11-07-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE0664, 29TPE1059, 29TPE1160, 29TPE1472, 29TPE2165, 29TPE2166, 29TPE2867, 29TPE2471, 29TPE2577, 29TPE2889, 29TPE3269, 29TPE3175.
- *Deilus fugax* (Olivier, 1790)
Material examined: **S-001**: 22-03-2004 (1, Pedro Sousa leg.; CIBIO/UP col.); **S-013**: 12-06-1997 (1, Jacinto Diamantino leg.); **S-068**: 14-06-2001 (1); **S-082**: 22-06-2004 (2 obs.).
UTM (1x1 Km): 29TPE1560, 29TPE2268, 29TPE2367, 29TPE3789.
- *Ergates faber* (Linnaeus, 1761)
Material examined: **S-068**: 29-07-2003 (1; CIBIO/UP col.); **S-080**: 27-07-2004 (1 obs.), 19-07-1999 (1, Soares-Vieira leg.); **S-090**: 22-06-2004 (1 obs.), 27-07-2004 (2 obs.), 28-07-2004 (1 obs.); **S-095**: 22-07-1999 (2); **S-099**: 03-09-2003 (1 obs.); **S-111**: 22-07-1999 (2); **S-112**: 28-07-2004 (1 obs.); **S-135**: 11-08-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE2268, 29TPE2274, 29TPE2371, 29TPE2372, 29TPE2375, 29TPE3075.
- *Hylotrupes bajulus* (Linnaeus, 1758)
Material examined: **S-031**: 22-06-1996 (1, Fernando Pinto leg.); **S-068**: 16-07-2000 (2 obs.), 31-07-2000 (2), 30-06-2001 (3); **S-074**: 19-12-1998 (1); **S-077**: 27-07-1999 (1 obs.); **S-080**: 18-12-1998 (1), 23-07-1999 (1); **S-085**: 30-06-2001 (3); **S-127**: 09-08-2000 (1).
UTM (1x1 Km): 29TPE1469, 29TPE2268, 29TPE2371, 29TPE2374, 29TPE2473, 29TPE2577, 29TPE3070.
- *Nothorhina punctata* (Fabricius, 1798)
Material examined: **S-068**: 18-07-2000 (1).
UTM (1x1 Km): 29TPE2268.
- *Nustera distigma* (Charpentier, 1825)
Material examined: **S-049**: 27-06-2000 (1); **S-097**: (29TPE3173), 04-06-2004 (1 obs.).
UTM (1x1 Km): 29TPE3173, 29TPE3576.
- *Oberea (Oberea) oculata* (Linnaeus, 1758)
Material examined: **S-061**: 28-06-2000 (1).
UTM (1x1 Km): 29TPE3377.
- *Paracorymbia (Paracorymbia) fulva* (De Geer, 1775)
Material examined: **S-080**: 21-06-2004 (1; CIBIO/UP col.); **S-121**: 20-07-1999 (3).
UTM (1x1 Km): 29TPE0764, 29TPE2371.
- *Phoracantha semipunctata* (Fabricius, 1775)
Material examined: **S-037**: 29-07-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2187.
- *Phytoecia cylindrica* (Linnaeus, 1758)
Material examined: **S-080**: 11-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2371.
- *Phytoecia pustulata* (Schrank, 1776)
Material examined: **S-057**: 27-05-2004 (1, Pedro Sousa leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE3886.
- *Prionus cortarius* (Linnaeus, 1758)
Material examined: **S-080**: 25-07-1999 (2 + 2 obs.); **S-142**: 29-07-1999 (1 obs.).
UTM (1x1 Km): 29TPE1072, 29TPE2371.
- *Pseudovadonia livida* (Fabricius, 1777)
Material examined: **S-027**: 28-06-1999 (1); **S-033**: 30-05-2001 (1); **S-073**: 04-06-2004 (1; CIBIO/UP col.); **S-080**: 18-06-1999 (3).
UTM (1x1 Km): 29TPE1964, 29TPE2371, 29TPE2889, 29TPE3272.

- *Purpuricenus ferrugineus* Fairmaire, 1851
Material examined: **S-009**: 22-06-2001 (1, Joana Castro leg.).
UTM (1x1 Km): 29TPE3493.
- *Rutpela maculata* (Poda, 1761)
Material examined: **S-074**: 21-07-1999 (1); **S-091**: 25-07-1999 (1).
UTM (1x1 Km): 29TPE2374, 29TPE2471.
- *Tetrops praeustus* (Linnaeus, 1758)
Material examined: **S-054**: 27-05-2004 [9 + 3 obs.; CIBIO/UP col. (6)].
UTM (1x1 Km): 29TPE3885.
- *Trichoferus fasciculatus* (Faldermann, 1837)
Material examined: **S-080**: 28-08-2001 (1); **S-085**: 22-08-2001 (1); **S-112**: 22-08-2000 (1).
UTM (1x1 Km): 29TPE2371, 29TPE2372, 29TPE2473.

CHRYSOMELIDAE Latreille, 1802

- *Arrhenocoela lineata* (Rossi, 1790)
Material examined: **S-061**: 14-08-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE3377.
- *Chrysolina (Chrysolina) bankii* (Fabricius, 1775)
Material examined: **S-039**: 13-05-2004 (1 obs.); **S-040**: 13-05-2004 (1 obs.); **S-054**: 27-05-2004 (1 obs.); **S-061**: 25-05-2004 (2 obs.); **S-080**: 24-05-2004 (2 obs.), 31-05-2004 (3 obs.); **S-081**: 07-10-1998 (1); **S-135**: 23-08-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE2371, 29TPE2573, 29TPE2586, 29TPE2788, 29TPE3377, 29TPE3885.
- *Clytra (Clytraria) atraphaxidis* (Pallas, 1793)
Material examined: **S-115**: 24-07-1999 (1, Soares-Vieira leg.).
UTM (1x1 Km): 29TPE2267.
- *Cryptocephalus (Burlinius) mystacatus* Suffrian, 1848
Material examined: **S-100**: 21-06-2004 (2; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2470.
- *Cryptocephalus (Cryptocephalus) octoguttatus* (Linnaeus, 1767)
Material examined: **S-087**: 21-06-2004 (2; CIBIO/UP col.); **S-100**: 21-06-2004 (2; CIBIO/UP col.); **S-131**: 22-06-2004 (2; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1573, 29TPE2470, 29TPE2472.
- *Cryptocephalus (Cryptocephalus) pexicollis* Suffrian, 1847
Material examined: **S-093**: 13-07-2004 (1, Pedro Sousa leg.; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2274.
- *Cryptocephalus (Cryptocephalus) vittatus* Fabricius, 1775
Material examined: **S-024**: 12-05-2004 (4; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1455.
- *Di cladispa testacea* (Linnaeus, 1767)
Material examined: **S-003**: 03-09-2003 (1 obs.); **S-010**: 29-07-2004 (1 obs.); **S-030**: 27-07-2004 (1 obs.); **S-032**: 28-07-2004 (3 obs.); **S-047**: 04-09-2003 (1 obs.); **S-053**: 24-07-1999 (2 obs.); **S-062**: 07-10-1998 (2); **S-067**: 15-07-2004 (1 obs.); **S-074**: 01-08-2003 (1; CIBIO/UP col.); **S-077**: 27-07-1999 (3 obs.); **S-104**: 29-07-2003 (1 obs.); **S-129**: 13-07-2004 (1 obs.); **S-133**: 14-07-2004 (1; CIBIO/UP col.); **S-137**: 12-05-1999 (1, Jacinto Diamantino leg.), 14-07-2004 (1 obs.); **S-139**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE0966, 29TPE1059, 29TPE1467, 29TPE2267, 29TPE2569, 29TPE2868, 29TPE2176, 29TPE2374, 29TPE2577, 29TPE2084, 29TPE3579, 29TPE3676, 29TPE3391, 29TPE3893.
- *Entomoscelis adonidis* (Pallas, 1771)
Material examined: **S-041**: 31-05-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1973.
- *Exosoma lusitanicum* (Linnaeus, 1767)
Material examined: **S-015**: 04-06-2004 (1 obs.); **S-029**: 12-07-2004 (1 obs.); **S-045**: 13-07-2004 (1 obs.); **S-052**: 26-05-2004 (1 obs.); **S-060**: 24-05-2001 (1 obs.); **S-089**: 12-07-2004 (1 obs.); **S-097**: 04-06-2004 (1 obs.); **S-098**: 04-06-2004 (1 obs.); **S-117**: 21-06-2004 (2 obs.); **S-125**: 14-07-2000 (1); **S-128**: 19-

- 07-2000 (1); **S-129**: 13-07-2004 (1 obs.); **S-139**: 14-07-2004 (1 obs.).
UTM (1x1 Km): 29TPE1467, 29TPE1665, 29TPE1964, 29TPE1971, 29TPE1974, 29TPE2064, 29TPE2570, 29TPE2773, 29TPE3168, 29TPE3173, 29TPE3779, 29TPE4292.
- *Leptinotarsa decemlineata* (Say, 1824)
Material examined: **S-011**: 03-09-2003 (1 obs.); **S-018**: 04-09-2001 (1, Martin Corley leg.); **S-030**: 01-08-2003 (1; CIBIO/UP col.); **S-123**: 31-07-2003 (1; CIBIO/UP col.); **S-135**: 27-04-1999 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160, 29TPE1569, 29TPE1864, 29TPE2868, 29TPE3291.
- *Lilioceris (Lilioceris) lili* (Scopoli, 1763)
Material examined: **S-135**: 10-04-2000 (1, Jacinto Diamantino leg.).
UTM (1x1 Km): 29TPE1160.
- *Oedionychus cinctus* (Fabricius, 1781)
Material examined: **S-005**: 24-03-2004 (2, Pedro Sousa leg.; CIBIO/UP col.); **S-071**: 23-04-2003 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2467, 29TPE3390.
- *Sermylassa halensis* (Linnaeus, 1767)
Material examined: **S-068**: 01-08-2000 (1).
UTM (1x1 Km): 29TPE2268.

APIONIDAE Schoenherr, 1823

- *Rhopalapion longirostre* (Olivier, 1807)
Material examined: **S-002**: 03-09-2003 [12, on *Althaea rosea*; CIBIO/UP col. (8)]; **S-132**: 13-07-2004 (2, on *Althaea rosea*; CIBIO/UP col.).
UTM (1x1 Km): 29TPE1673, 29TPE3089.
Comments: New species for the Portuguese fauna.
- *Trichapion simile* (Kirby, 1811)
Material examined: **S-088**: 02-09-2003 [3, on *Betula*; CIBIO/UP col. (2)].
UTM (1x1 Km): 29TPE2165.
Comments: New species for the Portuguese fauna.

ATELABIDAE Billberg, 1820

- *Atelabus nitens* (Scopoli, 1763)
Material examined: **S-140**: 12-05-2004 (1; CIBIO/UP col.).
UTM (1x1 Km): 29TPE0655.

CURCULIONIDAE Latreille, 1802

- *Gonipterus scutellatus* Gyllenhal, 1833
Material examined: **S-085**: 06-09-2001 (1).
UTM (1x1 Km): 29TPE2473.

RHYNCHITIDAE Gistel, 1856

- *Lasiorrhynchites (Stenorhynchites) coeruleocephalus* (Schaller, 1783)
Material examined: **S-068**: 29-06-2001 (1); **S-097**: 04-06-2004 (2; CIBIO/UP col.); **S-100**: 21-06-2004 (2; CIBIO/UP col.).
UTM (1x1 Km): 29TPE2268, 29TPE2470, 29TPE3173.

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Table I
Site code: Site toponym and 1x1 Km UTM square: Municipality

S-001: Lameira dos Matos (29TPE3789): Celorico da Beira	S-071: Beijames (29TPE2467): Manteigas
S-002: Linhares (29TPE3089): Celorico da Beira	S-072: Birch woodland below Nave de Santo António (29TPE2165): Manteigas
S-003: Near Alto de S. Domingos (29TPE3893): Celorico da Beira	S-073: Bordeiras (29TPE3272): Manteigas
S-004: Near Assanhas (29TPE3190): Celorico da Beira	S-074: Carvalheira (29TPE2374): Manteigas
S-005: Near Assanhas (29TPE3390): Celorico da Beira	S-075: Chão das Barcas (29TPE2375): Manteigas
S-006: Near Quinta da Requeixada (29TPE3892): Celorico da Beira	S-076: Covão da Ametade (29TPE2065): Manteigas
S-007: Near Quinta do Lagueirão (29TPE3894): Celorico da Beira	S-077: Covão da Ponte (29TPE2577): Manteigas
S-008: Near Tapada das Rasas (29TPE2890): Celorico da Beira	S-078: Covão de Santa Maria (29TPE2376): Manteigas
S-009: Pedra da Atalaia (Salgueirais) (29TPE3493): Celorico da Beira	S-079: Fonte Paulo Luis Martins (29TPE2165): Manteigas
S-010: Reservoir near Salgueirais (29TPE3391): Celorico da Beira	S-080: Fonte Santa (29TPE2371): Manteigas
S-011: Salgueirais (29TPE3291): Celorico da Beira	S-081: Leandres (29TPE2573): Manteigas
S-012: Serra do Ralo (29TPE3593): Celorico da Beira	S-082: Malhada Alta (29TPE2367): Manteigas
S-013: Alforfa (29TPE1560): Covilhã	S-083: Malhada do Carvalho (29TPE2366): Manteigas
S-014: Arragil (29TPE3269): Covilhã	S-084: Manteigas (village) (29TPE2373): Manteigas
S-015: Below Curgeira (29TPE3168): Covilhã	S-085: Manteigas (village) (29TPE2473): Manteigas
S-016: Canal de Alforfa (29TPE1560): Covilhã	S-086: Mata das Teixeira (29TPE2671): Manteigas
S-017: Cova (29TPE2771): Covilhã	S-087: Moitas (29TPE2472): Manteigas
S-018: Covão do Boi (29TPE1864): Covilhã	S-088: Near Curva do Teixo (29TPE2165): Manteigas
S-019: Near Barroca do Boi (29TPE2867): Covilhã	S-089: Near Fonte da Jonja (29TPE2064): Manteigas
S-020: Near Barroca do Boi (29TPE2868): Covilhã	S-090: Near Inatel facilities (29TPE2371): Manteigas
S-021: Near Cova (29TPE2670): Covilhã	S-091: Near Lomba Rapada (29TPE2471): Manteigas
S-022: Near Fraga do Rodeio (29TPE2263): Covilhã	S-092: Near Mata das Teixeira (29TPE2771): Manteigas
S-023: Near Ladeira (29TPE2971): Covilhã	S-093: Near Pedrão (29TPE2274): Manteigas
S-024: Near Muro Novo (29TPE1455): Covilhã	S-094: Near Pedrão (29TPE2275): Manteigas
S-025: Near Sítio do Ribeiro das Colmeias (29TPE3171): Covilhã	S-095: Near Penhas Douradas Observatory (29TPE2274): Manteigas
S-026: Near the chapel of Nossa Senhora do Perpétuo Socorro (29TPE2770): Covilhã	S-096: Near Poio de Oliveira (29TPE2269): Manteigas
S-027: Near the road tunnel, below Cântaro Raso (29TPE1964): Covilhã	S-097: Near Quinta Branca (29TPE3173): Manteigas
S-028: Ponte do Grilo (29TPE1356): Covilhã	S-098: Near Quinta da Alverca (29TPE2773): Manteigas
S-029: Próximo de Cântaro Raso (29TPE1964): Covilhã	S-099: Near Relva da Reboleira (29TPE3075): Manteigas
S-030: Reservoir in Beijames stream (29TPE2868): Covilhã	S-100: Near Vale da Adega (29TPE2470): Manteigas
S-031: Verdelhos (29TPE3070): Covilhã	S-101: Poço do Inferno (29TPE2570): Manteigas
S-032: Burrachota (29TPE2084): Gouveia	S-102: Quinta da Alagoa (Vale de Amoreira) (29TPE3175): Manteigas
S-033: Figueiró da Serra (29TPE2889): Gouveia	S-103: River Zêzere banks (29TPE2166): Manteigas
S-034: Mondeguinho (29TPE1974): Gouveia	S-104: River Zêzere banks (29TPE2267): Manteigas
S-035: Near Fonte do Lagarto (29TPE1981): Gouveia	S-105: River Zêzere valley, between Fonte Paulo Luis Martins and the river (29TPE2165): Manteigas
S-036: Near Quinta da Caramuja (29TPE1682): Gouveia	S-106: Road in river Zêzere valley (29TPE2268): Manteigas
S-037: Near Quinta do Freixial (29TPE2187): Gouveia	S-107: Road to Covão da Ponte (29TPE2574): Manteigas
S-038: Near Quinta do Freixial (29TPE2188): Gouveia	S-108: Road to Covões (29TPE2268): Manteigas
S-039: Near Quinta do Pinheiro (29TPE2586): Gouveia	S-109: Road to Mata do Fragusto (29TPE3176): Manteigas
S-040: Near Quinta do Tinoco (29TPE2788): Gouveia	S-110: Road to Torre (29TPE1865): Manteigas
S-041: Near Vale do Rossim reservoir (29TPE1973): Gouveia	S-111: S. Lourenço Hotel (29TPE2375): Manteigas
S-042: Ponte da Pedrinha (near Lagarinhos) (29TPE1383): Gouveia	S-112: Senhora dos Verdes (29TPE2372): Manteigas
S-043: Ponte das Costeiras (29TPE2080): Gouveia	S-113: Serra da Cabeça Alta (29TPE3476): Manteigas
S-044: Quinta da Fazenda (29TPE2787): Gouveia	S-114: Serra de Baixo (29TPE2567): Manteigas
S-045: Road to Vale do Rossim (29TPE1974): Gouveia	S-115: Serra de Baixo (near Lagoa Seca) (29TPE2267): Manteigas
S-046: Salgueiro stream banks (29TPE2175): Gouveia	S-116: Sítio do Troval (29TPE2575): Manteigas
S-047: Salgueiro stream banks (29TPE2176): Gouveia	S-117: Vale da Adega (29TPE2570): Manteigas
S-048: 500 m N of Quinta das Lameiras (29TPE3688): Guarda	S-118: Vidoeiro (29TPE2367): Manteigas
S-049: Alto da Ribeira do Sendão (29TPE3576): Guarda	S-119: Below Penedo Gordo (29TPE1473): Seia
S-050: Fernão Joanes (29TPE3983): Guarda	S-120: Above Aldeia da Serra (29TPE1275): Seia
S-051: Meios (29TPE3984): Guarda	S-121: Cabeça (29TPE0664): Seia
S-052: Near Aldeia Viçosa (29TPE4292): Guarda	S-122: Câmara de Carga do Desterro (Sabugueiro) (29TPE1172): Seia
S-053: Near Carapita (between Valhelhas and Famalicão) (29TPE3676): Guarda	S-123: Covão do Forno (29TPE1569): Seia
S-054: Near Moinho do Bufo (29TPE3885): Guarda	S-124: Curva da Morte (29TPE0970): Seia
S-055: Near Penedo da Sela (29TPE3883): Guarda	S-125: Moita do Conqueiro (Near Lagoacho reservoir) (29TPE1971): Seia
S-056: Near Quêcere stream (29TPE3582): Guarda	S-126: Near Fraga do Alvoço (29TPE1367): Seia
S-057: Near the reservoir in River Mondego (29TPE3886): Guarda	S-127: Near Lagoa Comprida (29TPE1469): Seia
S-058: Near Videmonte (29TPE3585): Guarda	S-128: Near Lagoa Serrano (29TPE1665): Seia
S-059: Quinta da Ireira (29TPE3683): Guarda	S-129: Near Penha do Gato (29TPE1467): Seia
S-060: Quinta das Lameiras (Famalicão) (29TPE3779): Guarda	S-130: Near Sabugueiro (29TPE1472): Seia
S-061: Quinta do Fragusto (29TPE3377): Guarda	S-131: Near Sabugueiro (29TPE1573): Seia
S-062: Quinta do Manel Tomaz (29TPE3579): Guarda	S-132: Near Sabugueiro (29TPE1673): Seia
S-063: Rio Mondego banks, near Quinta da Taberna (29TPE3482): Guarda	S-133: Near Vasco Esteves de Cima (29TPE1059): Seia
S-064: River Mondego banks (near the bridge between Videmonte and Trinta) (29TPE3785): Guarda	S-134: Near Vila Cova à Coelheira (29TPE0871): Seia
S-065: Trinta (29TPE3985): Guarda	S-135: Outeiro da Vinha (29TPE1160): Seia
S-066: Videmonte (29TPE3686): Guarda	S-136: Ponte de Jugais (29TPE0970): Seia
S-067: Above Vale Andinho (29TPE2569): Manteigas	S-137: Portela do Arão (29TPE0966): Seia
S-068: Albarcãs (River Zêzere banks) (29TPE2268): Manteigas	S-138: Ribeiro Branco (29TPE0970): Seia
S-069: Argenteira (29TPE2064): Manteigas	S-139: Rodeio Grande (29TPE1467): Seia
S-070: Beijames (29TPE2466): Manteigas	S-140: Safra (29TPE0655): Seia
	S-141: Sazes da Beira (29TPE0767): Seia
	S-142: Senhora do Desterro (29TPE1072): Seia