

COLEOPTERA AND HEMIPTERA OF THE GAIA BIOLOGICAL PARK (NORTHERN PORTUGAL) (2ND NOTE): ADDITIONS TO THE LIST AND NEW DISTRIBUTION DATA, WITH COMMENTS ON SOME SPECIES

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Abstract: Twenty-four species of Coleoptera and six species of Hemiptera are recorded for the first time from the Gaia Biological Park (northern Portugal), raising the combined diversity to 138 species (96 Coleoptera and 42 Hemiptera). Furthermore, new 1 km UTM squares within the Park are presented for eleven species of Coleoptera and six species of Hemiptera. The particular interest of the records of six of the novelties is highlighted, notably that of *Caenocara subglobosa* (Coleoptera, Anobiidae), which is recorded from Portugal for the first time.

Key words: Coleoptera, Hemiptera, *Caenocara subglobosa*, novelties, interesting records, Gaia Biological Park, northern Portugal.

Coleoptera y Hemiptera del Parque Biológico de Gaia (norte de Portugal) (2ª nota): Adiciones al catálogo y nuevos datos de distribución, con comentarios sobre algunas especies

Resumen: Veinticuatro especies de Coleoptera y seis de Hemiptera se registran por primera vez del Parque Biológico de Gaia (norte de Portugal), elevando el catálogo combinado a 138 especies (96 Coleoptera y 42 Hemiptera). Se presentan además nuevas cuadrículas UTM de 1 Km. en el Parque para 11 especies de Coleoptera y seis de Hemiptera. Se comenta el interés especial de los registros de seis de las novedades, particularmente el de *Caenocara subglobosa* (Coleoptera, Anobiidae), que se registra por primera vez de Portugal.

Palabras clave: Coleoptera, Hemiptera, *Caenocara subglobosa*, novedades, registros interesantes, Parque Biológico de Gaia, norte de Portugal.

Introduction

The Coleoptera and Hemiptera of Gaia Biological Park (PBG, from the Portuguese “Parque Biológico de Gaia”) were the subject of a recent preliminary inventory (Grosso-Silva & Soares-Vieira, 2009) containing 108 species (100 of which were first records for the area). The present contribution, which derives from the same study of the invertebrate fauna of the PBG (cf. Grosso-Silva & Soares-Vieira, 2009), complements the data presented with records of new species for the area and new distribution data for a number of species included in the first inventory.

Methods

The sampling techniques employed are the same as presented in Grosso-Silva & Soares-Vieira (2009).

The additions to the Coleoptera and Hemiptera inventories obtained after the publication of the first inventory are presented in Table I, whereas the new distribution data for species included in that inventory is presented in Table II. As in Grosso-Silva & Soares-Vieira (2009), species' recorded distributions in the Park are presented in 1 km UTM squares. Unless otherwise stated, the specimens studied were collected and identified by the authors and are preserved in the collection of CIBIO-UP. The abbreviation “obs.” indicates specimens that were identified in the field and not collected, applying also to one species that was photographed but not collected.

Results and Discussion

The data presented here refers to 30 species (24 Coleoptera and 6 Hemiptera) which constitute first records for the PBG. As a result, the Coleoptera inventory of the PBG now includes 96 species, and that of Hemiptera 42 species, adding up to a total of 138 species. Furthermore, new 1 km UTM squares are presented for 17 (11 Coleoptera and 6 Hemiptera) of the species listed by Grosso-Silva & Soares-Vieira (2009). As in the first inventory, the records of several species are considered of particular interest:

***Caenocara subglobosa* (Mulsant & Rey, 1864) (Col., Anobiidae).** New genus and species for the Portuguese fauna. The present record represents a very significant expansion of this species' known range in Iberia, hitherto limited to the province of Barcelona (Español, 1977, 1992).

***Altica palustris* (Weise, 1888) (Col., Chrysomelidae).** Second Portuguese record; previously only known from Arrábida (Setúbal) (Bastazo *et al.*, 1993).

***Cryptocephalus (Cryptocephalus) parvulus* Müller, 1776 (Col., Chrysomelidae).** Petitpierre (2000) considered that Oliveira's (1893) record from Monchique (southern Portugal) requires confirmation because of a possible confusion with *C. (C.) androgynae* Marseul, 1875 *ssp. pelleti* Marseul, 1875 (which is not known from Portugal). However, that is not the only Portuguese record of the *C. (C.) parvulus*, which was also mentioned from the north, from Sabrosa, without further detail (Barros,

1896) and from S. Martinho de Anta (Sabrosa) and S. Mamede de Recezinhos (Penafiel) (Nobre, 1898). The present record is the first in over a century in Portugal and confirms its presence in the north of the country.

***Tritoma bipustulata* Fabricius, 1775 (Col., Erotylidae).**

Fourth Portuguese record; previously only known from S. Martinho de Anta (Sabrosa) (Barros, 1924) and from Serra da Peneda (Arcos de Valdevez) and Serra da Cabreira (Vieira do Minho) (Grosso-Silva, 2005).

***Charopus pallipes* (Olivier, 1790) (Col., Malachiidae).**

The PBG is the fourth Portuguese area; previously known from S. Martinho de Anta (Sabrosa) (Fuente, 1931) and S. Torpes (Sines) (recorded as “S. Tonfes”) and Rosário (Alandroal) (recorded as “Rosario - Rio Guadiana”) (Plata & Santiago, 1990).

***Penthimia nigra* (Goeze, 1778) (Hem., Cicadellidae).**

The only Portuguese record found for this species was presented by Seabra (1941) (based on the collection of the Zoological Museum of Coimbra), who mentioned no localities. Therefore, we consider the present record to be a confirmation of the presence of *P. nigra* in Portugal, the Gaia Biological Park being its first confirmed Portuguese area of occurrence.

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Table I. Additions to the species list with known distributions in the Gaia Biological Park.

Order/Family	Species	Distribution
Coleoptera		
Anobiidae	<i>Anobium punctatum</i> (De Geer, 1774)	29TNF3749: 10-07-2009 (1 ♂)
	<i>Caenocara subglobosa</i> (Mulsant & Rey, 1864)	29TNF3649: 20-05-2009 (1 ♀), 23-05-2009 (1 ♀), 24-05-2009 (1 obs.), 05-07-2009 (1 ♀, Grosso-Silva coll.)
	<i>Mesocoelopus collaris</i> Mulsant & Rey, 1864	29TNF3749: 12-07-2009 (2 ♂ + 2 ♀)
Buprestidae	<i>Coroebus florentinus</i> (Herbst, 1801)	29TNF3749: 08-07-2009 (1, found dead on a path)
Carabidae	<i>Licinus (Licinus) aequatus</i> Audinet-Serville, 1821	29TNF3749: 15-07-2009 (1 ♂)
Cerambycidae	<i>Aredolpona fontenayi</i> (Mulsant, 1839)	29TNF3649: 02-07-2009 (1), 10-07-2009 (1 obs.)
	<i>Oberea (Oberea) oculata</i> (Linnaeus, 1758)	29TNF3749: 10-08-2009 (1)
Chrysomelidae	<i>Altica ampelophaga</i> (Guérin-Méneville, 1858)	29TNF3650: 06-05-2009 (1 ♂ + 1 ♀)
	<i>Altica palustris</i> (Weise, 1888)	29TNF3749: 31-10-2007 (1 ♂)
	<i>Chrysolina (Fastuolina) fastuosa</i> (Scopoli, 1763)	29TNF3649: 20-05-2009 (1 ♂ + 1 ♀), 23-05-2009 (1 ♂, Grosso-Silva coll.); 29TNF3749: 09-06-2009 (1)
	<i>Cryptocephalus (Cryptocephalus) cynarae</i> Suffrian, 1847	29TNF3650: 10-08-2009 (1)
	<i>Cryptocephalus (Cryptocephalus) parvulus</i> Müller, 1776	29TNF3650: 23-05-2009 (1)
	<i>Cryptocephalus (Cryptocephalus) vittatus</i> Fabricius, 1775	29TNF3749: 02-07-2009 (2, dead, floating on a tank)
Coccinellidae	<i>Adalia (Adalia) bipunctata</i> (Linnaeus, 1758)	29TNF3649: 20-05-2009 (1 obs.)
	<i>Chilocorus bipustulatus</i> (Linnaeus, 1758)	29TNF3649: 02-07-2009 (1)
	<i>Exochomus (Exochomus) nigromaculatus</i> (Goeze, 1777)	29TNF3650: 24-05-2009 (1)
Curculionidae	<i>Lixus (Eulixus) iridis</i> Olivier, 1807	29TNF3749: 23-05-2009 (1 obs., photo, Alonso-Zarazaga det.)
	<i>Tachyerges salicis</i> (Linnaeus, 1758)	29TNF3649: 10-08-2009 (1)
Erotylidae	<i>Tritoma bipustulata</i> Fabricius, 1775	29TNF3749: 06-05-2009 (1)
Malachiidae	<i>Charopus pallipes</i> (Olivier, 1790)	29TNF3650: 06-05-2009 (1 ♂, Pedro Sousa leg.)
Melolonthidae	<i>Euserica lucipeta</i> Baraud, 1965	29TNF3650: 15-07-2009 (1 ♂)
	<i>Triodontella castillana</i> (Baraud, 1961)	29TNF3650: 09-06-2008 (1 ♂)
Rutelidae	<i>Hoplia philanthus</i> (Fuesslin, 1775)	29TNF3749: 20-05-2009 (1)
Sphenophoridae	<i>Sphenophorus striatopunctatus</i> (Goeze, 1777)	29TNF3749: 13-03-2009 (1, Alonso-Zarazaga det.), 24-03-2009 (1, Alonso-Zarazaga det.)
Hemiptera		
Cicadellidae	<i>Penthimia nigra</i> (Goeze, 1778)	29TNF3749: 23-05-2009 (1)
Lygaeidae	<i>Spilostethus pandurus</i> (Scopoli, 1763)	29TNF3749: 02-07-2009 (1 obs.)
Membracidae	<i>Centrotus chloroticus</i> Fairmaire, 1851	29TNF3749: 12-07-2009 (1)
	<i>Centrotus cornutus</i> (Linnaeus, 1758)	29TNF3749: 27-05-2009 (1)
Pentatomidae	<i>Eysarcoris venustissimus</i> (Schränk, 1776)	29TNF3649: 23-05-2009 (obs.: 1 ♂ + 1 ♀), 29TNF3650: 24-05-2009 (1, Pedro Sousa leg.)
Veliidae	<i>Microvelia pygmaea</i> (Dufour, 1833)	29TNF3749: 28-08-2009 (1 ♂ + 2 ♀)

Table II. New distribution data for species already recorded from the Gaia Biological Park.

Order/Family	Species	Data from new 1 km UTM squares
Coleoptera		
Cantharidae	<i>Rhagonycha (Rhagonycha) fulva</i> (Scopoli, 1763)	29TNF3649: 05-07-2009 (2 obs.), 08-07-2009 (1 obs.)
	<i>Rhagonycha (Rhagonycha) iberica</i> Dahlgren, 1975	29TNF3749: 26-04-2009 (obs.: 1 ♂ + 1 ♀), 20-05-2009 (1)
Cerambycidae	<i>Prionus coriarius</i> (Linnaeus, 1758)	29TNF3650: 15-07-2009 (2 ♂ obs.)
Chrysomelidae	<i>Agelastica alni</i> (Linnaeus, 1758)	29TNF3750: 02-05-2009 (obs.: 1 ♂ + 1 ♀)
	<i>Chrysolina (Chrysolina) bankii</i> (Fabricius, 1775)	29TNF3649: 24-05-2009 (1 obs.)
	<i>Dicladispa testacea</i> (Linnaeus, 1767)	29TNF3649: 05-07-2009 (2 obs.); 29TNF3650: 10-08-2009 (5 obs.)
Coccinellidae	<i>Adalia (Adalia) decempunctata</i> (Linnaeus, 1758)	29TNF3749: 10-07-2009 (1 obs.), 26-07-2009 (1 obs.), 19-08-2009 (1 obs.)
	<i>Thea vigintiduopunctata</i> (Linnaeus, 1758)	29TNF3649: 20-05-2009 (1 obs.)
	<i>Tytthaspis (Tytthaspis) sedecimpunctata</i> (Linnaeus, 1758)	29TNF3649: 12-07-2009 (1 obs.)
Lucanidae	<i>Dorcus parallelipipedus</i> (Linnaeus, 1758)	29TNF3749: 08-07-2009 (1 ♂, found dead on a path), 25-07-2009 (1 ♀ obs. dead on a path)
	<i>Lucanus cervus</i> (Linnaeus, 1758)	29TNF3649: 20-05-2009 (1 ♀ obs. flying at 4:10 PM); 29TNF3749: 13-06-2009 (1 ♂ obs., found dead on the ground), 05-07-2009 (3 ♀ obs., 2 of which found dead on the ground)
Hemiptera		
Coreidae	<i>Coreus marginatus</i> (Linnaeus, 1758)	29TNF3649: 08-07-2009 (1 obs.)
Hydrometridae	<i>Hydrometra stagnorum</i> (Linnaeus, 1758)	29TNF3749: 10-07-2009 (2 obs.), 28-08-2009 (2 obs.)
Nabidae	<i>Himacerus (Aptus) mirmicoides</i> (O. Costa, 1834)	29TNF3650: 06-05-2009 (1, Pedro Sousa leg.)
Pentatomidae	<i>Graphosoma lineatum</i> (Linnaeus, 1758) ssp. <i>italicum</i> (Müller, 1766)	29TNF3649: 20-05-2009 (10 obs.), 23-05-2009 (obs.: 1 ♂ + 1 ♀), 27-05-2009 (1 obs.), 10-08-2009 (4 obs.)
	<i>Rhaphigaster nebulosa</i> (Poda, 1761)	29TNF3649: 26-04-2009 (1 obs.)
Tingidae	<i>Corythucha ciliata</i> (Say, 1832)	29TNF3649: 12-07-2009 (1 obs.)