

## MISCELLANEOUS RECORDS OF DRAGONFLIES (ODONATA) FROM CONTINENTAL PORTUGAL - II

Sónia Ferreira, José Manuel Grosso-Silva & Pedro Sousa

CIBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos, Campus Agrário de Vairão, 4485-661 Vairão; Portugal.

SF: hiporame@gmail.com – JGS: jmgrossosilva@yahoo.com – PS: prsousa@gmail.com.

**Abstract:** The known distribution of 34 dragonfly species is extended in continental Portugal. Six species are recorded for the first time from Alvão Natural Park, *Diplacodes lefebvrui* (Rambur, 1842) is recorded for the first time from Sudoeste Alentejano and Costa Vicentina Natural Park, and *Coenagrion mercuriale* (Charpentier, 1840) from Douro Internacional Natural Park.

**Key words:** Odonata, faunistics, new records, continental Portugal.

### Registros de odonatos para Portugal continental (Odonata) - II

**Resumen:** Se presentan registros de 34 especies de Odonata, ampliando los conocimientos sobre su distribución en Portugal continental. Seis de las especies son novedades para la fauna del Parque Natural do Alvão, *Diplacodes lefebvrui* (Rambur, 1842) es nueva para la fauna del Parque Natural del Sudoeste Alentejano y Costa Vicentina, y *Coenagrion mercuriale* (Charpentier, 1840) para la fauna del Parque Natural de Douro Internacional.

**Palabras clave:** Odonata, faunística, nuevos registros, Portugal continental.

### Introduction

Aiming to improve the known distribution of dragonfly species in continental Portugal, especially in the protected areas, the present work follows the same format of a previous one (Ferreira *et al.*, 2005a). The information presented here was largely obtained in fieldwork conducted during 2005, which was mainly carried out in the northern half of continental Portugal and whose results do not fit a more specific treatment, as done for Montesinho Natural Park (Ferreira *et al.*, 2005b). Although the geographic areas here referred were not subject to a detailed Odonata study and most of the data are sporadic records, the results are still very interesting, with six species being found for the first time in Alvão Natural Park (AlvNP), including *Oxygastra curtisii* (Dale, 1834), which is considered vulnerable by the IUCN and is included in the Fauna-Flora-Habitat directive of the European Union (Sahlén *et al.*, 2004). Furthermore, *Coenagrion mercuriale* (Charpentier, 1840) (with the same status as the previous species), was found for the first time in Douro Internacional Natural Park (DINP) and *Diplacodes lefebvrui* (Rambur, 1842) was recorded for the first time from Sudoeste Alentejano and Costa Vicentina Natural Park (SACVNP).

Additionally, in the context of the preparation of a critical checklist of the Odonata of Portugal (Ferreira *et al.*, *in press*), the collection of the Zoological Museum of Coimbra (MZCP) was examined and the data of some specimens collected in the 1980's is presented here for the first time. This collection included 4 species collected in Paúl de Arzila Nature Reserve, abbreviated as "PANR" in the Species list.

The specimens listed below include vouchers collected by the authors, which unless otherwise stated are deposited in CIBIO/UP's collection and also field observa-

tions (specimens captured for identification and released afterwards, which are indicated by the abbreviation "obs."). One exuvia was also collected, being indicated by the abbreviation "exuv."

Specimens' identification was based on Askew (1988) and Aguilar & Dommanget (1998).

### Species list

#### Calopterygidae Buchecker, 1876

##### *Calopteryx haemorrhoidalis* (Vander Linden, 1825)

MATERIAL EXAMINED: **Loulé:** Fonte Benémola (29SNB8718 - 320 m), 08-09-2005 (1 ♂). **Odemira:** Almogrove (PNSACV) (29SNB1964 - 60 m), 09-09-2005 (2 ♂♂ and 1 ♀). All specimens in Sónia Ferreira's collection.

MZCP SPECIMENS EXAMINED: **Coimbra:** Arzila (29TNE34), 19-05-1987 (1 ♂ and 1 ♀, C. Frias *leg.*); Ceira (29TNE54), 10-06-1989 (1 ♂, L. Pereira *leg.*). **Figueira da Foz:** Carvalhais (29TNE13), 09-07-1988 (1 ♂, M. F. Soares *leg.*).

##### *Calopteryx virgo* (Linnaeus, 1758) ssp. *meridionalis* Sélys, 1873

MATERIAL EXAMINED: **Mondim de Basto:** Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂ obs.). **Seia:** Balocas stream (29TPE0557 - 280 m), 12-07-2005 (1 ♂ obs.).

MZCP SPECIMENS EXAMINED: **Sever do Vouga:** Sever do Vouga (29TNF50), 07-07-1987 (2 ♂♂ and 1 ♀, A. Silva *leg.*).

##### *Calopteryx xanthostoma* (Charpentier, 1825)

MATERIAL EXAMINED: **Fundão:** Meimoa stream (29TPE3249 - 420 m), 11-06-2005 (2 ♂♂). **Mondim de Basto:** Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂ obs.).

MZCP SPECIMENS EXAMINED: **Coimbra:** Paúl de Arzila (PANR) (29TNE34), 19-05-1987 (2 ♂♂, A. F. de Almeida *leg.*); Choupal (29TNE45), 25-06-1989 (1 ♂, P. Maranhão *leg.*).

COMMENTS: First record for Alvão Natural Park.

## Lestidae Sélys, 1840

*Lestes virens* (Charpentier, 1825)

MZCP SPECIMENS EXAMINED: **Sever do Vouga**: Sever do Vouga (29TNF50), 07-07-1987 (1 ♂, A. Silva leg.).

*Lestes viridis* (Vander Linden, 1825)

MATERIAL EXAMINED: **Loulé**: Fonte Benémola (29SNB8718 - 320 m), 08-09-2005 (1 ♂, Sónia Ferreira col.).

MZCP SPECIMENS EXAMINED: **Águeda**: Pateira de Fermentelos (29TNE49), 20-6-1987 (1 ♀, C. Ferreira leg.). **Coimbra**: Paúl de Arzila (PANR) (29TNE34), 10-6-1987 (1 ♂ and 1 ♀, J. Fidalgo leg.).

*Sympecma fusca* (Vander Linden, 1820)

MZCP SPECIMENS EXAMINED: **Figueira da Foz**: Carvalhais (29TNE13), 09-07-1988 (1 ♂, M. F. Soares leg.). **Coimbra**: Coimbra (29TNE45), 01-04-1988 (1 ♀, A. Paula leg.).

## Coenagrionidae Kirby, 1890

*Coenagrion mercuriale* (Charpentier, 1840)

MATERIAL EXAMINED: **Figueira de Castelo Rodrigo**: Escarigo (DINP) (29TPF8223 - 580 m), 09-05-2005 (1 ♂ obs.); Near Figueira de Castelo Rodrigo village (29TPF6830 - 630 m), 09-05-2005 (2 ♂♂ obs.). **Torre de Moncorvo**: Olgas stream (Urros) (29TPF6852 - 380 m), 10-05-2005 (1 ♂ obs.).

COMMENTS: First record for Douro International Natural Park.

*Coenagrion puella* (Linnaeus, 1758)

MZCP SPECIMENS EXAMINED: **Coimbra**: Choupal (29TNE45), 30-04-1989 (1 ♀, P. Domingos leg.); Coimbra (29TNE45), 27-05-1989 (1 ♀, Pardal leg.).

*Coenagrion scitulum* (Rambur, 1842)

MATERIAL EXAMINED: **Meda**: Alto do Vale Redondo (29TPF4929 - 490 m), 17-05-2005 (1 ♂ obs.). **Sabugal**: Near Casteleiro (29TPE5262 - 570 m), 11-06-2005 (1 ♀).

MZCP SPECIMENS EXAMINED: **Coimbra**: Paúl de Arzila (PANR) (29TNE34), 10-6-1987 (1 ♂, C. Ferreira leg.).

*Erythromma lindenii* (Sélys, 1840)

MATERIAL EXAMINED: **Loulé**: Fonte Benémola (29SNB8718 - 320 m), 08-09-2005 (1 ♂, Sónia Ferreira col.).

MZCP SPECIMENS EXAMINED: **Coimbra**: Choupal (29TNE45), 25-06-1989 (1 ♂, Caldeira leg.).

*Pyrrhosoma nymphula* (Sulzer, 1776)

MATERIAL EXAMINED: **Figueira de Castelo Rodrigo**: Near Santa Maria de Aguiar convent (29TPF7327 - 660 m), 09-05-2005 (1 ♂). **Torre de Moncorvo**: Maçores (29TPF6655 - 500 m), 10-05-2005 (1 ♂). **Vila Nova de Foz Côa**: Senhora do Campo (29TPF6642 - 180 m), 11-05-2005 (1 ♂).

MZCP SPECIMENS EXAMINED: **Sever do Vouga**: Sever do Vouga (29TNF50), 01-07-1987 (1 ♂, A. Silva leg.).

*Enallagma cyathigerum* (Charpentier, 1840)

MATERIAL EXAMINED: **Aljezur**: Odeceixe (PNSACV) (29SNB1942 - 100 m), 09-09-2005 (1 ♂, Sónia Ferreira col.). **Figueira de Castelo Rodrigo**: Near Figueira de Castelo Rodrigo village (29TPF6830 - 630 m), 09-05-2005 (1 ♂ obs.).

*Ischnura graellsii* (Rambur, 1842)

MATERIAL EXAMINED: **Figueira de Castelo Rodrigo**: Near Figueira de Castelo Rodrigo village (29TPF6830 - 630 m), 09-05-2005 (3 ♂♂); Ponte Nova (near Santa Maria de Aguiar reservoir), 09-05-2005 (2 ♂♂). **Tavira**: Almargem stream (near the road bridge) (29SPB2212 - 5 m), 29-04-2005 (1 ♀). **Torre de Moncorvo**: Olgas stream (Urros) (29TPF6852 - 380 m), 10-05-2005 (1 ♂); Urros (29TPF6850 - 450 m), 10-05-2005 (1 ♂). **Vila Nova de Foz Côa**: Piscos stream (29TPF5743 - 160 m), 11-05-2005 (2 ♂♂); Senhora do Campo (29TPF6642 - 180 m), 11-05-2005 (1 ♂).

MZCP SPECIMENS EXAMINED: **Coimbra**: Choupal (29TNE45), 02-06-1989 (1 ♂, F. Correia leg., 1 ♂, P. Domingos leg.); Choupalinho (29TNE45), 17-05-1989 (1 ♂, Maranhão leg.).

*Ischnura pumilio* (Charpentier, 1825)

MZCP SPECIMENS EXAMINED: **Coimbra** (29TNE45), 01-07-1989 (1 ♂, Pardal leg.).

*Ceriagrion tenellum* (Villers, 1789)

MZCP SPECIMENS EXAMINED: **Coimbra**: Paúl de Arzila (PANR) (29TNE34), 30-6-1987 (1 ♂, J. Fidalgo leg.).

## Platycnemididae Tillyard, 1938

*Platycnemis acutipennis* Sélys, 1841

MATERIAL EXAMINED: **Fundão**: Meimoa stream (29TPE3249 - 420 m), 11-06-2005 (1 ♂ and 2 ♀♀). **Mondim de Basto**: Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (c. 50 ♂ obs.). **Vila Nova de Foz Côa**: Senhora do Campo (29TPF6642 - 180 m), 11-05-2005 (1 ♂).

COMMENTS: First record for Alvão Natural Park.

*Platycnemis latipes* Rambur, 1842

MATERIAL EXAMINED: **Fundão**: Meimoa stream (29TPE3249 - 420 m), 11-06-2005 (1 ♂).

MZCP SPECIMENS EXAMINED: **Águeda**: Pateira de Fermentelos (29TNE49), 30-6-1987 (1 ♂, C. Ferreira leg.). **Coimbra**: Choupal (29TNE45), 28-05-1989 (1 ♀, A. Mendes leg.), 02-06-1989 (1 ♂, F. Correia leg.), 21-06-1989 (1 ♀, Caldeira leg.), 25-06-1989 (1 ♀, P. Maranhão leg.).

## Aeshnidae Sélys, 1850

*Aeshna cyanea* (Müller, 1764)

MATERIAL EXAMINED: **Mondim de Basto**: Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 exuv., Weihrauch leg. et col.).

MZCP SPECIMENS EXAMINED: Coimbra (29TNE45), 16-06-1987 (1 ♀, C. Frias leg.).

COMMENTS: First record for Alvão Natural Park.

*Aeshna mixta* Latreille, 1805

MZCP SPECIMENS EXAMINED: **Águeda**: Pateira de Fermentelos (29TNE49), 30-06-1987 (1 ♀, C. Ferreira leg.).

*Anax imperator* Leach, 1815

MATERIAL EXAMINED: **Vila Real**: Fundeira reservoir (AlvNP) (29TPF0089 - 1060 m), 02-08-2005 (1 ♂ obs.).

COMMENTS: First record for Alvão Natural Park.

*Boyeria irene* (Fonscolombe, 1838)

MATERIAL EXAMINED: **Mondim de Basto**: Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂ obs.).

## Gomphidae Sélys, 1850

*Onychogomphus forcipatus* (Linnaeus, 1758) ssp. *unguiculatus* Vander Linden, 1823

MATERIAL EXAMINED: **Fundão**: Meimoa stream (29TPE3249 - 420 m), 11-06-2005 (1 ♂).

*Onychogomphus uncatus* (Charpentier, 1840)

MATERIAL EXAMINED: **Mondim de Basto**: Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂ obs.).

## Cordulegastridae Fraser, 1940

*Cordulegaster boltonii* (Donovan, 1807)

MATERIAL EXAMINED: **Mondim de Basto**: Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂). **Seia**: Balocas stream (29TPE0557 - 280 m), 12-07-2005 (1 ♂ obs.).

## Corduliidae Tillyard, 1926

*Oxygastra curtisii* (Dale, 1834)

MATERIAL EXAMINED: **Mondim de Basto:** Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂).

COMMENTS: First record for Alvão Natural Park.

## Libellulidae Sélys, 1850

*Crocothemis erythraea* (Brullé, 1832)

MATERIAL EXAMINED: **Aljezur:** Rogil (PNSACV) (29SNB1737 - 90 m), 04-09-2005 (1 ♂, Sónia Ferreira col.). **Estarreja:** Salreu (29TNF3609 - 3 m), 26-05-2005 (1 ♂ obs.). **Vila Nova de Foz Côa:** Senhora do Campo (29TPF6642 - 180 m), 11-05-2005 (1 ♀).

MZCP SPECIMENS EXAMINED: **Águeda:** Pateira de Fermentelos (29TNE49), 30-6-1987 (1 ♂, C. Ferreira leg.). **Coimbra:** Coimbra (29TNE45) 11-06-1989 (1 ♀, Pardal leg.). **Montemor-o-Velho:** Montemor-o-Velho (29TNE24), 02-06-1987 (1 ♀, A. F. de Almeida leg.).

*Diplacodes lefebvreii* (Rambur, 1842)

MATERIAL EXAMINED: **Aljezur:** Odeceixe (PNSACV) (29SNB1942 - 100 m), 09-09-2005 (1 ♀, Sónia Ferreira col.); Rogil (PNSACV) (29SNB1737 - 90 m), 04-09-2005 (1 ♂). **Ponte de Sôr:** near Ponte de Sôr (29SND74), late April-2001 (1 ♂ and 1 ♀, R. Malkmus leg., R. Jodicke col.).

COMMENTS: First record for SACVNP.

*Libellula depressa* Linnaeus, 1758

MATERIAL EXAMINED: **Macedo de Cavaleiros:** Lamas de Póndice (29TPG7105 - 680 m), 12-05-2005 (1 ♂ and 1 ♀).

*Libellula quadrimaculata* Linnaeus, 1758

MATERIAL EXAMINED: **Figueira de Castelo Rodrigo:** Near Figueira de Castelo Rodrigo village (29TPF6830 - 630 m), 09-05-2005 (1 ♂).

*Orthetrum chrysostigma* (Burmeister, 1839)

MATERIAL EXAMINED: **Odemira:** Odemira (PNSACV) (29SNB3161 - 3 m), 03-09-2005 (1 ♂ and 1 ♀, Sónia Ferreira col.).

*Orthetrum coerulescens* (Fabricius, 1798)

MATERIAL EXAMINED: **Castelo Branco:** Near Marateca Reservoir (29TPE2925 - 370 m), 11-06-2005 (1 ♂). **Loulé:** Fonte Benémola (29SNB8718 - 320 m), 08-09-2005 (1 ♂, Sónia Ferreira col.). **Mondim de Basto:** Varzigueto (AlvNP) (29TNF9581 - 730 m), 02-08-2005 (1 ♂ obs.).

COMMENTS: First record for Alvão Natural Park.

*Sympetrum fonscolombii* (Selys, 1840)

MZCP SPECIMENS EXAMINED: **Coimbra:** Coimbra (29TNE45), 31-05-1987 (1 ♂ and 1 ♀, I. Gomes leg.), 27-06-1989 (1 ♂, Pardal leg.); Solum (29TNE55), 10-07-1987 (1 ♀, A. Rego leg.); Tovim (29TNE55), 27-06-1987 (1 ♂, J. António leg.). **Fi-**

**gueira da Foz:** Carvalhais (29TNE13), 07-09-1988 (1 ♀, M. F. Soares leg.). **Montemor-o-Velho:** Quinta do Taipal (29TNE24), 09-07-1988 (1 ♀, P. Anastácio leg.).

*Sympetrum striolatum* (Charpentier, 1840)

MATERIAL EXAMINED: **Porto:** Botanical Garden (29TNF25 - 70 m), 26-10-2005 (1 ♂, Sónia Ferreira col.).

MZCP SPECIMENS EXAMINED: **Coimbra:** Coimbra (29TNE45), 01-07-1989 (1 ♂, Pardal leg.); Santa Clara (29TNE45), 15-05-1989 (1 ♂, L. Pereira leg.).

*Trithemis annulata* (Palisot de Beauvois, 1807)

MATERIAL EXAMINED: **Castelo Branco:** Marateca reservoir (29TPE2925 - 390 m), 11-06-2005 (1 ♂). **Idanha-a-Nova:** Senhora da Graça (29TPE5119 - 190 m), 11-06-2005 (1 ♂). **Odemira:** São Teotónio (Monchique) (29SNB3546 - 110 m), 05-09-2005 (1 ♂, Sónia Ferreira col.).

## Acknowledgements

The authors would like to thank Florian Weihrauch for the help and support given in the study of Odonata as for his companionship during the fieldwork at Alvão Natural Park and to Reinhard Jödicke for kindly sharing the data of the *Diplacodes lefebvreii* specimens kept in his collection. Thanks are also due to Dr. Isabel Carreira and Dr. José Reis at the University of Coimbra for the kindness of allowing the study of the Zoological Museum's collection.

## References

- AGUILAR, J. & J.-L. DOMMANGET 1998. *Guide des Libellules d'Europe et d'Afrique du Nord*. Les Guides du Naturalist, Delachaux et Niestlé. Paris. 463 pp.
- ASKEW, R. R. 1988. *The dragonflies of Europe*. Harley Books, Colchester. 291 pp.
- FERREIRA, S., J.M. GROSSO-SILVA & P. SOARES-VIEIRA 2005a. Miscellaneous records of dragonflies and damselflies (Insecta, Odonata) from Continental Portugal. *Boletín de la Sociedad Entomológica Aragonesa*, **36**: 275-277.
- FERREIRA, S., J.M. GROSSO-SILVA & P. SOUSA 2005b. A Contribution to the Knowledge of the Odonata of Montesinho Natural Park (NE Portugal). *Boletín de la Sociedad Entomológica Aragonesa*, **37**: 249-250.
- FERREIRA, S., J.M. GROSSO-SILVA, M. LOHR, F. WEIHRACH & R. JÖDICKE (in press). A critical checklist of the Odonata of Portugal. *International Journal of Odonatology*, **9** (2).
- SAHLÉN, G., R. BERNARD, A. CORDERO, R. KETELAAR & F. SUHLING 2004. Critical species of Odonata in Europe. In: CLAUSNITZER, V. & R. JÖDICKE (eds.), "Guardians of the watershed. Global status of dragonflies: critical species, threat and conservation". *International Journal of Odonatology*, **7**(2): 385-398.