

**ODONATA OF ROMANESCU PARK (CRAIOVA, ROMANIA)
IN THE YEARS 2022 AND 2023**

Babalean Anda Felicia

¹University of Craiova, Faculty of Horticulture, Craiova

* Correspondence author. E-mail: anda.babalean@ucv.ro, anda_babalean@yahoo.com

Keywords: damselfly, dragonfly, Romanescu Park

ABSTRACT

*This paper presents recent data on the Odonata from Romanescu Park: the faunistic list; morphological aspects (general habitus, the male abdominal appendages of *Ischnura elegans* (Vander Linden, 1820) and *Pyrrhosoma nymphula* (Sulzer, 1776), wing and male accessory genitalia of *Orthemtrum coerulescens* (Fabricius, 1798)); species assemblages.*

INTRODUCTION

The dragonflies (Odonata) are insects whose life is linked with the aquatic environment. The dragonfly fauna of Oltenia region is under-studied, and even less known is the fauna of urban areas subjected to the anthropic factor.

Romanescu Park is a large recreational area located on the southern part of Craiova. The park has an area of several tens of hectares, of which a large water surface that includes a main lake and a shallow, slow flowing stream. The stream runs to the park from one end to the other. The aquatic vegetation consists mainly of reed on the edges of the stream and white waterlily on the surface of the lake. The history of the park begins with the years 1844 as a private property and with 1900 as a public property (Ciobotea et al. 1999). In the last 20 years it has undergone several maintenance works, affecting the wetland, sometimes to the point of drying it out.

MATERIAL AND METHODS

The dragonfly fauna was studied between May 2022 and July 2023 by visual inspections; specimens were also collected with the entomological net. Species identifications was done using the identification keys and the literature: Askew (2004), Boudot et al. (2019), Cîrdei & Bulimar (1965), Dijkstra et al. (2020), Smallshire & Swash (2020), Wildermuth & Martens (2019). All the photos were taken by author.

RESULTS AND DISCUSSIONS

Systematic account

Suborder Zygoptera

Fam. Calopterygidae

Calopteryx splendens (Harris, 1780), (May – August 2022, 2023) – collected,

Fam. Platycnemididae

Platycnemis pennipes (Pallas, 1771), (May – September 2022, 2023) – collected, Fig. 1

Fam. Coenagrionidae

Coenagrion puella (Linnaeus, 1758) (May 2022, May 2023) – collected,

Erythromma sp. (August 2022) – visual inspection,

Ischnura elegans (Vander Linden, 1820), (May – September 2022, 2023) – collected, Fig. 2

Pyrrhosoma nymphula (Sulzer, 1776), (May 2023) – collected, Fig. 2

Suborder Anisoptera

Fam. Aeshnidae

Aeshna isoceles (O.F. Müller, 1767), (June 2022) – collected,

Fam. Gomphidae

Onychogomphus forcipatus (Linnaeus, 1758), (July 2022) – visual,

Fam. Libellulidae

Crocothemis erythraea (Brullé, 1832), (August 2022) – visual inspection,

Libellula fulva Müller, 1764, (June 2022) – collected, Fig. 3

Orthetrum coerulescens (Fabricius, 1798), (June – August 2022, 2023) – collected, Fig. 4

Orthetrum albistylum (Selys, 1848), (July – August 2022) – visual inspection,

Sympetrum striolatum (Charpentier, 1840), (September 2022) – collected,

Sympetrum sanguineum (Müller, 1764), (August, September 2022) – collected.

Along the wetland, two dragonfly (Anisoptera) species assemblages were found, species that share the same habitat over the same time, as follows:

1) *Calopteryx splendens*, *Orthetrum coerulescens*, *Libellula fulva* and *Aeshna isoceles* in the narrow flow area, at the entrance to the park. On the bank of the stream in this area, over a length of about 10 meters, between 10 to 20 individuals could be counted. The most numerous specimens were the males of *Orthetrum coerulescens* perching the tall vegetation or in flight, engaged in territorial fight with conspecifics or with *Aeshna isosceles*.

2) *Orthetrum albistylum* and *Crocothemis erythraea* in the lake zone, both species with much less numerous individuals compared with the stream area.



Figure 1. *Platycnemis pennipes* – males, colour morphs



Figure 2. The male abdominal appendages of *Ischnura elegans* (left) and *Pyrrhosoma nymphula* (right)



Figure 3. *Libellula fulva*, 01 July 2022



Figure 4. *Orthetrum coerulescens*: male general habitus (01 July 2022), forewing and male accessory genitalia (specimen 14 June 2022)

CONCLUSIONS

Despite the anthropogenic factor, the dragonfly fauna in Romanescu Park is well represented, consisting of 6 Zygopteran species and 8 Anisopteran species.

REFERENCES

Askew R. R. 2004. The dragonflies of Europe (revised edition), Harley Books, 308 pp.

Boudot J-P., Doucet G., Grand D. 2019. Cahier d'identification des libellules de France, Belgique, Luxembourg et Suisse, Biotope, 152 pp.

Ciobotea D., Bădescu I., Zarzără I., Pleniceanu V., Avram C., Lukacs S. Grădinile și parcurile Craiovei în Craiova – Pagini de istorie și civilizație, Editura de Sud, Craiova, pg.35-69

Cirdei F., Bulimar F. 1965. Fauna R. P. R. – Insecta, vol. VII, fasc. 5 Odonata, Editura Academiei R. P. R., 276 pp.

Dijkstra K-D B., Schröter A., Lewington R. 2020. Field guide to the dragonflies of Britain and Europe, second edition e-pdf., Bloomsbury Publishing London.

Smallshire D., Swash A. 2020. Europe's dragonflies, A field guide to the damselflies and dragonflies e-pdf, Princeton University Press.

Wildermuth H., Martens A. 2019. Die Libellen Europas, Alle Arten von den Azoren bis zum Ural im Porträt, Quelle & Meyer Verlag Wiebelsheim, 958 pp.