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Odonata of the City of Plovdiv and its Surroundings

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Abstract. Updated list of the dragonflies (order Odonata) of the city of Plovdiv and its environs contains 26 species from 7 families: Aeshnidae (4), Libellulidae (9), Gomphidae (4), Calopterygidae (2), Coenagrionidae (3), Lestidae (3) and Platycnemididae (1).

Key words: fauna, dragonflies, damselflies, Plovdiv City, Bulgaria.

Introduction

First data about Odonata of Plovdiv we find in the publication of Klapalek (1894), but the order has not been subject of a special study in the city of Plovdiv and the data are relatively a little. The only specialized study of the species is that of an Angelov (1960). Here are presented both well-known literature data and some new records.

The information used in the current study is from the following literature sources Klapalek (1894), Petkov (1921, 1914), Urbanski (1947), Angelov (1960), Beshovski (1964), Rusev (1966), Dumont (1977), Rusev et al. (1981), Uzunov et al. (1981), Marinov (2001).

Material and Methods

The information presented in this paper is a summary of the above listed literary sources, as well as of personal observations. New data are on the base of observations of D. Dimitrov. The valid species names are according to "World Odonata Checklist" (Paulson et al., 2022).

Checklist

Suborder Anisoptera

Family Aeshnidae

Aeshna affinis Vander Linden, 1820

Known locality: „Otdih i kultura" Park, adult, gender unspecified (Angelov, 1960).

Aeshna mixta Latreille, 1805

Known locality: City of Plovdiv, 24.08.1938, adult, male (Urbanski, 1947).

Anax parthenope (Selys, 1839)

Known locality: City of Plovdiv, 21.08.1938, adult, gender unspecified (Urbanski, 1947).

Anax ephippiger (Burmeister, 1839)

Known locality: City of Plovdiv, 04.09.1970, adult, male (Marinov, 2001).

Family Libellulidae

Crocothemis erythraea (Brullé, 1832)

Known locality: City of Plovdiv, 21.08.1938 and 23.08.1938 adults, females (Urbanski, 1947).

Libellula fulva Müller, 1764

Known locality: City of Plovdiv, 06.1906, adult, gender unspecified (Petkov, 1914).

New record: Maritza River west of Plovdiv, UTM LG16, 42.154072N 24.721869E, 24.5.2022, 2 male and 1 female; Maritza River west of Plovdiv, UTM LG06, 42.141429N 24.690245E, 5.6.2022, 1 male (D. Dimitrov observation).

Orthetrum albistylum (Selys, 1848)

Known localities: "Otdih i kultura" Park (Angelov, 1960); city of Plovdiv (Petkov, 1921); city of Plovdiv, 21.08.1938 and 23.08.1938, adults, females (Urbanski, 1947).

New record: "Tsar Simeonova gradina" Park, UTM LG16, 42.142092N 24.748918E, 05.07.2019, 1 female; Maritza River west of Plovdiv, UTM LG06, 42.149587N 24.667275E, 19.6.2022, 1 male (D. Dimitrov observation).

Orthetrum brunneum (Fonscolombe, 1837)
Known locality: city of Plovdiv, 23.08.1938, adult, female (Urbanski, 1947).
New record: River stream southeast of Plovdiv, UTM LG16, 42.098319N 24.789190E, 23.7.2021, 1 female (D. Dimitrov observation).

Orthetrum cancellatum (Linnaeus, 1758)
New record: Maritza River west of Plovdiv, UTM LG16, 42.148133N 24.708658E, 24.5.2022, 1 male; Maritza River west of Plovdiv, UTM LG16, 42.153911N 24.721026E, 19.6.2022, 1 male (D. Dimitrov observation).

Orthetrum coerulescens (Fabricius, 1798)
Known locality: city of Plovdiv, 26.06.1912, adult, female, Buresh leg. (according Marinov, dissertation, unpublished).
New record: River stream southeast of Plovdiv, UTM LG16, 42.098319N 24.789190E, 23.7.2021, 6 male and 4 female (D. Dimitrov observation).

Sympetrum depressiusculum (Selys, 1841)
Known locality: city of Plovdiv, adult, gender unspecified (Petkov, 1921).

Sympetrum fonscolombii (Selys, 1840)
Known locality: "Otdih i kultura" Park, adult, gender unspecified (Angelov, 1960).
New record: Maritza River west of Plovdiv, UTM LG06, 42.141292N 24.693745E, 28.07.2019, 1 male (D. Dimitrov observation).

Sympetrum meridionale (Selys, 1841)
Sympetrum meridionalis Selys: Angelov (1960).
Known localities: "Otdih i kultura" Park (Angelov, 1960); city of Plovdiv, 24.08.1938, adult, male (Urbanski, 1947).

Family Gomphidae

Stylurus flavipes (Charpentier, 1825)
Known localities: "Otdih i kultura" Park (Angelov, 1960); Maritsa River by the city of Plovdiv, 14.07.1955, larva (Rusev, 1966); Maritsa River below the city of Plovdiv (Rusev et al., 1981); Maritsa River above the city of Plovdiv (Uzunov et al., 1981).

Gomphus vulgatissimus (Linnaeus, 1758)
Known locality: Maritsa River above the city of Plovdiv (Uzunov et al., 1981).

Onychogomphus forcipatus (Linnaeus, 1758)
Known localities: city of Plovdiv (Petkov, 1921), 23.08.1938, adult, female (Urbanski, 1947).

Ophiogomphus cecilia (Geoffroy in Fourcroy, 1785)
Ophiogomphus serpentines Charp.: Angelov (1960), Petkov (1914), Urbanski (1947).
Known localities: "Otdih i kultura" Park (ANGELOV, 1960); channel of the State fishery company in the city of Plovdiv, 11.05.1956, larva (Beshovski, 1964), city of Plovdiv (Petkov, 1914, Beshovski, 1964); city of Plovdiv, 23.08.1938, adult, male (Urbanski, 1947); Maritsa River below the city of Plovdiv (Uzunov et al., 1981).

Suborder Zygoptera
Family Calopterygidae

Calopteryx splendens (Harris, 1780)
Agrion splendens Harris: Angelov (1960).
Known localities: "Otdih i kultura" Park (Angelov, 1960); Maritsa River by the city of Plovdiv, 07.10.1955, larva (Beshovski, 1964); Maritsa River by the city of Plovdiv, 23.08.1938, adult, female (Urbanski, 1947); Maritsa River below the city of Plovdiv (Rusev et al., 1981); Maritsa River above the city of Plovdiv (Uzunov et al., 1981).
New records: Maritza River to the pedestrian bridge, UTM LG16, 42.154582N 24.752768E, 02.06.2018, 2 males end 1 female; Near the bridge of V. Aprilov Boul., UTM LG16, 42.153858N 24.731537E, 16.06.2019, 1 male, 42.153675N 24.726612E, 12.07.2019, 1 female; Maritza River west of Plovdiv, UTM LG06, 42.141680N 24.694719E, 28.07.2019, 2 males (D. Dimitrov observation).

Calopteryx virgo (Linnaeus, 1758)
Known locality: Maritsa River below the city of Plovdiv, 15.06.1947, larva (Rusev, 1966).
New records: Maritza River west of Plovdiv, UTM LG16, 42.147125N 24.707961E,

24.05.2022, 2 males end 1 female (D. Dimitrov observation).

Family Coenagrionidae

Coenagrion puella (Linnaeus, 1758)
Known locality: Maritsa River by the city of Plovdiv, 12.06.1972, adult, gender unspecified (Dumont, 1977).

Ischnura elegans (Vander Linden, 1820)
Known localities: Maritsa River by the city of Plovdiv, 03.08.1893, adult, gender unspecified (Klapalek, 1894); 23.08.1938, adult, male (Urbanski, 1947).

Ischnura pumilio (Charpentier, 1825)
Known locality: Maritsa River by the city of Plovdiv, adult, gender unspecified (Petkov, 1921).

Family Lestidae

Lestes barbarus (Fabricius, 1798)
Lestes barbara F.: Angelov (1960).
Known locality: "“Otdih i kultura” Park (Angelov, 1960).

Lestes dryas Kirby, 1890
Known locality: “Otdih i kultura” Park (Angelov, 1960).

Sympecma fusca (Vander Linden, 1820)
Sympicna fusca Vand.: Angelov (1960).
Known locality: “Otdih i kultura” Park (Angelov, 1960).

Family Platycnemididae

Platycnemis pennipes (Pallas, 1771)
Known localities: Maritsa River by the city of Plovdiv (Petkov, 1921, Rusev, 1966), 23.08.1938, adult, male (Urbanski, 1947); Maritsa River below the city of Plovdiv, 05.06.1947, larva (Rusev et al., 1981).
New records: Near the bridge of V. Aprilov Boul., UTM LG16, 42.154120N 24.729588E, 05.07.2019, 8 males and 4 females; 42.153898N 24.729477E, 12.07.2019 2 males (D. Dimitrov observation).

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