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Contribution to the knowledge of the caddisflies of Dagestan, Russia

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Introduction

Dagestan is a Republic of the Russian Federation situated in the North Caucasus and Ciscaucasia, along the Caspian Sea. This republic is the southernmost tip of Russia, sharing land borders with the Russian republics of Chechnya and Kalmykia to the west and north, with Stavropol Krai to the northwest and with the countries of Georgia and Azerbaijan to the southwest and south. Dagestan has more than 500 kilometers of coastline on the Caspian Sea, the largest lake in the world. In total, 155 lakes are noted in Dagestan. There are 6255 rivers in the republic. Major rivers are Terek (623 km), Samur (216 km), Avar Koisu (178 km) and Sulak (144 km). The highest point is Bazardyuzu peak at 4466 meters on the border with Azerbaijan. The southernmost point of Russia is located about seven kilometers southwest of the peak.

Dagestan is one of the richest regions of Russia in terms of the diversity of landscapes. Accordingly, the diversity of animals and plants inhabiting these landscapes is also great. There are about 4500 species of plants, almost 100 species of mammals, more than 350 species of birds, up to 50 species of reptiles and amphibians, about 80 species of fish and thousands of species of various invertebrates. There are officially 46 specially protected natural territories in Dagestan, including 6 federal and 38 regional ones. The total area of officially approved protected natural territories of Dagestan is more than 600.000 hectares.

The modern list of caddisfly species in the fauna of Russia includes 28 families and 652 species (IVANOV 2011; IVANOV & MELNITSKY 2012; MELNITSKY & IVANOV 2017, 2021; SALOKANNEL & IVANOV 2020). The Caucasus fauna has 50% (77 species) unique species not found in other regions of Russia; this percentage for the Russian Far East is 57%, for European Russia 31%, and for Siberia 15%. The Caucasus is dominated by Limnephilidae, Leptoceridae and Hydroptilidae. According to recent data, 155 species of caddisflies inhabit the Caucasus. Dagestan and Chechnya are traditionally considered as the Eastern Caucasian region of Russia. The fauna of caddisflies in this region has been studied insufficiently. Only 40 species from 14 families are known (IVANOV 2011).

This publication presents data based on a small collection from Dagestan taken during May – June 2022 by Eugene Tsvetkov (St.Petersburg). All materials are deposited in the Zoological Institute of the Russian Academy of Sciences, St.Petersburg. The author is grateful to Eugene Tsvetkov who kindly provided the material for the study.

Sampling localities in Dagestan, leg. E.V.Tsvetkov with light traps:

Locality 1: 1 km SW Krasnopartizansk, 42°16'13"N, 47°49'58"E, 42m, 11.5.2022.

Loc. 2: 1 km SW Nytyug, 41°44'45"N, 48°05'46"E, 575m, 9.5.2022.

Loc. 3: Balka Uzek, 42°59'49"N, 47°10'36"E, 125m, 29.5.2022.

Loc. 4: 2 km SW Chirkei, 400m, 2.5.2022 and 21.5.2022.

Loc. 5: Western environs of Muni, 730m, 4.6.2022.

Loc. 6: 3 km S Sirtych, 41°47'48"N, 48°12'50"E, 320m, 10.5.2022 and 11.6.2022.

Loc. 7: Chirkata, 42°46'43"N, 46°43'27"E, 840m, 30.5.2022.

Loc. 8: Datuna, 950m, 8.6.2022.

Loc. 9: Gubden, 42°32'22"N, 47°36'23"E, 560m, 14.5.2022.

List of species

Philopotamidae

Dolophilodes ornata ULMER, 1909: L2 1♂. – Distribution: China, Kazakhstan, Nepal, Bhutan, Iran, Pakistan. This is the first record for Russia and the Eastern Caucasus.

Hydropsychidae

Hydropsyche acuta MARTYNOV, 1909: L1 1♂. – Distribution: Russia Ciscaucasia, Central, southern and eastern Causasus), Bulgaria, Turkey, Iran.

Hydropsyche sciligma MALICKY, 1977: L5 2♂, 4♀; L6 1♀ (10.5.2022), 4♂, 5♀ (11.6.2022); L7 8♂; L8 2♂, 2♀. – Distribution: Russia (Ciscaucasia, Central, southern and eastern Caucasus), Turkey, Iran.

Cheumatopsyche lepida PICTET, 1834: L6 1♂, 6♀ (11.6.2022). – Distribution: Russia (European part, Siberia, Ciscaucasia, Cental and southern Caucasus), Europe, Turkey, North Africa. This is the first record for the eastern Caucasus.

Phryganeidae

Phryganea grandis LINNAEUS 1758: L3 1♀. – Distribution: Russia (European part, Siberia, Far Est, Ciscaucasia), Europe, Turkey, Kazakhstan. This is the first record for Eastern Caucasus.

Limnephilidae

Astratodes turanus MARTYNOV 1928: L4 1♂ (21.5.2022), 8♂, 2♀ (2.5.2022); L9 1♂. – Distribution: Russia (Dagestan), Kazakhstan, Turkmenistan, Iran.

Grammotaulius nigropunctatus RETZIUS, 1783: L1 1♀; L4 1♂ (21.5.2022). – Distribution: Russia (European part, Siberia, Far East, Caucasus), Europe, Turkey.

Limnephilus affinis CURTIS 1834: L4 1♂, 2♀ (2.5.2022). – Distribution: Russia (European part, Siberia, Caucasus), Europe, Turkey.

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