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Contributions to the caddisfly fauna (Trichoptera) of the central-western part of the Balkan Peninsula

[Zur Köcherfliegenfauna (Trichoptera) der mittleren und westlichen Balkan-Halbinsel]

Krassimir Kumanski

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New faunistic data on Trichoptera from Albania and Macedonia based on collections recently deposited in the National Museum of Natural History Sofia, Bulgaria are announced. The families of Ecnomidae and Phryganeidae, 3 genera (*Ecnomus*, *Phryganea*, *Ceraclea*) and 5 species are added to the Albanian Check-list, that numbers now 53 species. 19 species and 6 genera (*Agapetus*, *Cheumatopsyche*, *Agrypnia*, *Oligoplectrum*, *Mesophylax*, *Ceraclea*) are added to the list of Trichoptera from Macedonia which now comprises 92 species. The results are far from the quantity of species expected to occur in the regions of the Balkan Peninsula considered herewith.

1 Introduction

The neighbouring territories of Albania and Macedonia (the European part of Turkey not included) represent the least investigated region of the Balkan Peninsula regarding the Caddisfly fauna. The last (and the only, however) surveying paper on Albanian fauna is that of OBR (1969), with 48 species listed. Quite similar is the situation with Macedonia where the figure of 73 species has been announced (PETKOVSKI 1997). Bearing in mind the various relief and ecological conditions in this part of the Balkan Peninsula on the one hand, and the high number of species known from the adjacent countries, i.e. Bulgaria and Greece, on the other, one can estimate that the above-mentioned figures correspond to about 25-35% of these countries' actual caddis-fauna only.

During the last few years some Bulgarian zoologists have carried out several collecting trips in Albania and Macedonia. Although not numerous, Trichoptera adults are represented in the collections; the object of the present paper is the study of the same.

2 Localities and material determined

2.1 Albania

Loc.1. Gjirokastra Prov., Jorgucati vill., 23.06.1995 (leg. SA, at light):

Hydropsyche mostarensis KLAPALEK

1 male. This W.Balkan (Dinaric) faunal element has been reported from Albania by OBR (1969). Its easternmost limits of distribution include the westernmost territory of Bulgaria where however it is very rare.

Hydropsyche modesta NAVAS

1 male. Together with *H. bulbifera* MCLACHLAN and *H. contubernalis* MCLACHLAN, this species is among the most common representatives of the *guttata*-Group of the genus in SW Palearctic (and in the Balkan Peninsula in particular). However, lots of misinterpretations and using of various names (including synonymous ones) for most of this group's species have been provoked by the long-lasting lack of modern revision of corresponding type material. Thus it is now clear enough that both *H. ornatula* MCLACHLAN and *H. guttata* PICTET are valid species, although the first is rare (*ornatula*) and the second is locally distributed (*guttata*). The occurrence of both species in Albania, announced by OBR (1969) needs serious confirmation. Instead of *ornatula* and *guttata* it seems now quite probable that in fact *bulbifera* and *contubernalis* had been in Dr. Obr's material. Anyhow, *H. modesta* is mentioned for certain from Albania for the first time.

Loc. 2. Shkoder (= Skadar) lake, Zogaj vill., 04.06.1992 (leg. SB, at light). The following 4 species have been collected there:

Ecnomus tenellus RAMBUR

1 male and 2 females. One of the most widely spread caddisfly in general - the whole Palearctic region, India, Ceylon. The family of Ecnomidae, with the genus and species, are new to the Albanian fauna.

Phryganea grandis LINNAEUS (*Phr. ochrida* MALICKY ?)

1 female. Females of this pair of closely related species are hardly recognizable so far. As in the previous paragraph, this is the first report of family Phryganeidae from this country.

Ceraclea dissimilis (STEPHENS)

5 males and 4 females. A species common in Europe. Genus and species new to Albania.

***Athripsodes dalmatinus* MALICKY**

14 males and 2 females. This species has been described (MALICKY 1980) and known only after old museum specimens (collected in the 19th century) from Croatia (former Yugoslavia). New species to Albania.

Note: The above-listed four species are obligate or facultative inhabitants of standing waters. Doubtlessly they represent only a small part of the Trichoptera-coenose of such a large freshwater basin as the Skadar-lake. The fact that RADOVANOVIC (1953) had not found any caddisflies although having spent three days on its shores should be explained only by a total lack of "collector's fortune". Thus the lake of Skadar (and Albania as a whole) is a good example of a Balkan region where faunistic investigations on Trichoptera should preferably be carried out.

2.2 Macedonia

Loc. 1. Shar Mts., Leshniza, Krivoshijza riv. (1480 m alt.), 20-21.07.1995 (leg. VS & GB):

***Rhyacophila loxias* SCHMID**

1 male. Balkan endemic, known in Macedonia from Babuna Mts. only (PAVLOVSKI 1987).

***Rhyacophila armeniaca* GUERIN**

1 male. A S.-E. European (s.l.) species, occurring in the Balkan Peninsula, Asia Minor and the Caucasus. In Macedonia reported from the Babuna Mts. only (PAVLOVSKI 1987).

***Drusus biguttatus* PICTET**

3 males. Common in Central Europe and in the Balkan Peninsula, but not reported from Macedonia.

***Drusus discolor* RAMBUR**

6 males. Another common representative of the genus, established in Macedonia on the Perister Mts. (BOTOSANEANU 1960).

***Potamophylax cingulatus* STEPHENS**

1 male. European species, new to Macedonia.

Loc. 2. Shar Mts., Lyuboten Massive, "Lyuboten" hut and a streamlet nearby (1630-1680 m alt.), 15.07.1997 (leg. ML):

***Micropterna nycterobia* MCLACHLAN**

1 male. Common S.W.- Palearctic species, its adults often aestivating in caves, i.e. typical representative of the "regular trogloxenes" category. New to Macedonia.

***Micropterna caesareica* SCHMID**

1 female. Another regular cave visitor, occurring in the Balkan Peninsula and Asia Minor. First report from Macedonia.

Loc. 3. Shar Mts., Lyubotenska river, east of the "Lyuboten" hut, the stretch between 1500 and 1700 m alt., 16.07.1997 (leg. ML):

***Philopotamus montanus* (DONOVAN)**

1 male. Common in Europe, in its Southern regions predominantly mountainous rhitrobiontic species. In Macedonia reported only from the southern mountains Perister and Yablaniza. This is its first report from the Shar Mts.

***Philopotamus variegatus* (SCOPOLI)**

1 male. Similar as the previous species, but much more rare than the latter. In Macedonia known so far only from the Perister Mts. (RADOVANOVIC 1943).

***Philopotamus* sp.**

1 female. Quite probably belonging to one of the above-mentioned two species, whose females remain hardly distinguishable.

***Wormaldia pulla* (MCLACHLAN)**

1 male. This is a quite rare crenobiontic caddisfly, occurring in Central and S.Europe. New to Macedonia.

***Tinodes rostocki* MCLACHLAN**

1 male and (cf.) 2 females. Rhithro- and crenobiont. Distribution: Central and South Europe. First communication from this country.

***Hydropsyche fulvipes* (CURTIS)**

2 males and 2 females. W.Palearctic species. From Macedonia reported from the Perister and the Yablaniza Mts. (RADOVANOVIC 1943).

***Thremma anomalum* MCLACHLAN**

1 male. A typically crenobiontic Carpathian-Balkan subendemic, already known from the S.Macedonian mountains (RADOVANOVIC 1943; BOTOSANEANU 1960). The second author gives it as "tres comun" New to the Shar Mts.

***Adicella filicornis* (PICTET)**

2 males and 4 females. Mid- and South European species, one of the few crenobiontic representatives of the large, predominantly limnobiontic family Leptoce-
ridae. New to Macedonia.

Loc. 4. same as Loc. 3, between 1400 and 1450 m alt., 14.07.1997 (leg. ML):

***Philopotamus variegatus* (SCOPOLI)**

2 males (considerably differing in size). Other information cf. Loc.3.

***Wormaldia occipitalis* (PICTET)**

1 male and 2 females. Polymorphous species, distributed in Central and South Europe. Reported by BOTOSANEANU (1960) from the Perister Mts. First found in the Shar Mts.

***Tinodes* sp.**

1 female.

***Hydropsyche* sp.**

1 female (quite dark).

Loc. 5. Shar Mts., Lyubotenska riv. above Vratniza vill., ca. 600 m alt., 20.07.1997 (leg. ML):

***Micrasema minimum* MCLACHLAN**

1 male. Central and South European species, already known in Macedonia - Perister Mts. (BOTOSANEANU 1960). New to the Shar Mts.

Loc. 6. Gostivar, upper stream of the Vardar riv., 18.07.1979, (leg. JG, at light):

***Polycentropus excisus* K LAPALEK**

1 male and 1 female. Central and South-East European mountain species (the Alps, the Carpathians and the Balkan Peninsula). New to Macedonia.

***Hydropsyche instabilis* (CURTIS),**

Very abundant (66 males collected). A species broadly spread in W.Palaearctic; from Macedonia reported only once - Perister Mts. (RADOVANOVIC 1943).

***Hydropsyche mostarensis* K LAPALEK**

4 males and 4 females. For other information see the text with Loc.1 , Albania.

***Hydropsyche* spp.**

72 females (quite probably, mainly *instabilis*).

***Goera pilosa* (FABRICIUS)**

1 female. Broadly spread throughout the West Palearctic. MARINKOVIC (1975) mentions it from Macedonia without exact locality or the source of information.

***Sericostoma flavicorne* SCHNEIDER**

3 females. Distribution: Central and South Europe, Asia Minor, Lebanon. This variable species has been described under several names (now synonymized). RADOVANOVIC (1943) reports it from Macedonia (Galitshiza Mts.) as *S. timidum* and *S. turbatum*.

Loc. 7. Skopje, midstream of the Vardar riv., 11.05.1995 (leg. SB, at light):

***Oligoplectrum maculatum* (FOURCROY)**

1 female. European caddisfly. Both the genus and the species new to Macedonia.

Loc. 8. Stobi vill., distr. Kavadarci (the Vardar basin), 30.05.1992 (leg. SB, at light):

***Psychomyia pusilla* (FABRICIUS)**

1 female. A common epipotamobiont, wide-spread throughout West Palearctic. In Macedonia known from the region of the big southern lakes.

***Hydropsyche modesta* NAVAS**

2 males. A species typical in the potamal, common in South Europe and Asia Minor. Not reported from Macedonia so far.

***Hydropsyche* spp.**

(many females, ones of *modesta* probably dominating).

***Mesophylax impunctatus aduncus* NAVAS**

1 female. After a revision of this genus (Malicky, in print), the eastern part of the Balkan Peninsula is inhabited by this species and not by *H. aspersus* RAMBUR as KUMANSKI (1988) reports it from Bulgaria. Genus and species new to Macedonia.

***Goera pilosa* (FABRICIUS)**

1 male. (cf. note with this species in Loc. 6).

Loc. 9. Demir Kapiya, Vardar riv., 21.06.1995 (leg. SA, at light):

***Hydropsyche modesta* NAVAS**

Abundant (42 males and many females collected).

***Hydropsyche contubernalis* MCLACHLAN**

2 males. Species not mentioned so far from this country.

***Hydropsyche bulbifera* MCLACHLAN**

1 male. Another common and wide-spread potamophilous caddisfly species, expected here.

***Hydropsyche* spp.**, 145 females (predominately *modesta*).

***Cheumatopsyche lepida* (PICTET)**

16 males (no females !).

Also a regular representative of the benthic coenoses in the potamal. New genus and species to Macedonia.

***Ceraclea dissimilis* (STEPHENS)**

2 males and 2 females. This is a species of broad ecological plasticity, thus occurring in stagnant and lotic waters as well. Genus and species new to Macedonia.

Loc. 10. Foothills of the Osogovska Mts., Bregalniza riv. (basin of Vardar), Istibanya vill., 17.07.1979 (leg. JG, at light):

***Rhyacophila fasciata* HAGEN**

1 male. A commonly spread eurythermic rhithrobiont, mentioned from this country by MARINKOVIC (1975).

***Agapetus* sp.**

1 female. No representative of that genus has been published from Macedonia so far.

***Psychomyia pusilla* (FABRICIUS)**

3 females.

***Hydropsyche bulbifera* MCLACHLAN**

1 male and 5 females.

***Hydropsyche incognita* PITSCH**

8 males and 10 females. A very typical member of the potamal caddisfly coenoses. It however has been misidentified and respectively announced as the closely related *H. pellucidula* (CURTIS); after separating of this close pair of species (PITSCH 1993) a thorough re-examining of all materials previously reported as *pellucidula* (including those of Bulgaria (KUMANSKI 1985) is needed. The latter also occurs in the Balkan Peninsula, but appears to be much rare and inhabiting the upper stretches of the potamal, i.e. being attached to the epipotamal.

***Hydropsyche* sp. (spp.?)**

6 females, different than the two above-mentioned species.

Loc. 11. "Dup, Doyran, 17.08.1918, (leg. Mayor Taraktshiev)":

***Agrypnia varia* (FABRICIUS)**

1 female. This old specimen has been found pinned among the mixed unidentified collections of the NMNH, Sofia. West Palearctic species of the stagnant water habitats, most probably originating from the Doyran lake. New genus and species to Macedonia.

Loc. 12. Galitshiza Mts., 1400 m alt., 22.06.1995 (leg. SA, at light):

***Micropterna sequax* MCLACHLAN**

1 male and 1 female. A regular member of the so-called "complex of regular trogloxenes", already known in this country.

Loc. 13. Ohrid lake, Oushani vill., 19.07.1979 (leg. JG, at light):

***Orthotrichia* sp., cf. *costalis* (CURTIS)**

2 females. This wide-spread West Palearctic limno- and potamobiontic hydroptilid has been reported from the Ohrid lake (RADOVANOVIC 1943; BOTOSANEANU 1960) under its synonymous name *O. tetensi* KOLBE.

***Ecnomus tenellus* (RAMBUR)**

abundant (29 males and 4 females collected). One of the most wide-spread caddisflies, inhabiting stagnant waters of nearly the whole Palearctic region. Also already known in the lake.

***Hydropsyche incognita* PITSCH**

1 male. This specimen does surely not develop in the lake and originates from some adjacent stream there.

***Hydropsyche* spp.**

(2 spp.), 3 females. Also not components of the proper lake's faunistic complex.

***Phryganea ochrida* MALICKY**

5 males and 2 females. The lake of Ohrid is the locus typicus of this close relative to *Phryganea grandis* LINNAEUS (MALICKY 1975). It has been established to vicarise with the latter, replacing it in the Central and Southern parts of the Balkan Peninsula.

***Athripsodes albifrons* (LINNAEUS)**

1 male. Facultative limno- and potamobiontic species, spread in almost the entire territory of Europe, but relatively rare, especially in its southern regions. This specimen has been already announced by KUMANSKI (1988).

***Athripsodes cinereus* (CURTIS)**

1 male and 5 females. Another West-Palaearctic ecologically broad-scoped lepto- cerid, common in lakes. RADOVANOVIC (1943) has found several specimens at the same lake.

***Leptocerus tineiformis* CURTIS**

12 males and 14 females. Probably the most common lepto- cerid in Ohrid lake, reported under the synonymous names of *Setodes tineiformis* CURTIS (RADOVA- NOVIC 1943) and *Ymyia tineiformis* McLACHLAN (BOTOSANEANU 1960). Europe, except for the northernmost territories.

***Mystacides longicornis* (LINNAEUS)**

3 males and 11 females. As the previous species, very common in the Ohrid lake; reported by RADOVANOVIC (1943) and BOTOSANEANU (1960), the second author using the synonymic name *M. monochroa* (LINNAEUS).

Note: Thanks mainly to the above-mentioned papers of RADOVANOVIC (1943; 1953) and BOTOSANEANU (1960), the Lake of Ohrid and the vicinity appears to be the best explored region of Macedonia concerning its Trichoptera fauna. About 20 species are reported as lake inhabitants, most of them very abundant and common there. This figure however, is still below the definitive one and its increasing with future investigations should be expected. The families of Hydroptilidae, Lepto- ceridae and to a certain extent Limnephilidae (each of them including a considerable number of limnobiontic species) could be regarded as main sources for the suggestion just made.

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Anschrift des Verfassers: Dr. K. Kumanski, National Museum of Natural History, 1 Boul. Zar Osoboditel, BG-1000 Sofia

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