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First record of *Mesophylax aspersus* (Rambur, 1842) from the Republic of Kosovo (Trichoptera Limnephilidae)

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ABSTRACT The distribution of *Mesophylax aspersus* Curtis, 1834 (Trichoptera Limnephilidae) ranges from Western Europe, Mediterranean region, Madeira, Canary Islands and up to South-western Asia. According to the present knowledge it is however almost absent from South-eastern Europe. In this paper we present first record of *M. aspersus* from the Republic of Kosovo. This is at the same time first country record of the genus. Unlike many countries where this species is present abundantly in our case it is extremely rare. A single adult male specimen of *M. aspersus* was found in an ultraviolet light trap at the Blinajë Hunting Reserve on August 23rd 2013. This has been a single specimen of this species caught at this locality during a one year monthly sampling of caddisflies with UV light traps and entomological net. Another male specimen has been caught on September 24th 2014 at the same locality. Streams and rivers in all parts of Kosovo were surveyed during the period 2009-2014 for Trichoptera species and currently the Blinajë Hunting Reserve is the only locality where this species has been found. The distributional area of this species has been considerably expanded by this record. The closest country where this species has been recorded is Bosnia and Herzegovina.

KEY WORDS *Mesophylax aspersus*; Kosovo; Trichoptera; Balkan Peninsula.

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INTRODUCTION

The genus *Mesophylax* McLachlan 1882 (Trichoptera Limnephilidae) is classified according to Schmid (1955, 1957) in Stenophylacini tribus close to genera *Stenophylax* Kolenati, 1848 and *Micropterna* Stein, 1874; this genus consists by only six species in the European fauna (Malicky, 1998; 2004).

Species of genus *Mesophylax* are mainly distributed in the Mediterranean area and radiate quite far to the West, North, East, South-west and South-east (Malicky, 1998).

Mesophylax aspersus Curtis, 1834 has a distribution mostly limited in countries surrounding the Mediterranean Sea, occurring from the Canary Islands to the Near East (e.g. Schmid, 1957; Botosaneanu, 1974; Dakki, 1987; Bonada, 2004).

From the biological point of view, adults of *M. aspersus* emerge in spring and undergo a summer diapause in caves (Bouvet & Ginet, 1969; Botosaneanu, 1974; Salavert et al., 2011). They do not feed during the adult stage, surviving most probably on the reserves of the adipose tissue accumulated during the larval phase (Bournaud, 1971).

MATERIAL AND METHODS

Data sampling and processing

Adult caddisfly specimens were collected with entomological net and ultraviolet light trap. The sampling was carried out monthly between March and December 2013 and only casually during the autumn of 2014. Ultraviolet light was placed above the white pan of 60 cm in diameter filled 10 cm with water with a few drops of detergent. The trap was placed on stream bank and operated from dusk until next morning. Collected samples were preserved in 80 % ethanol. The specimens were identified under a stereomicroscope with determination keys from Malicky (2004) and Kumanski (1985, 1988). Specimens were collected by Halil Ibrahimi and were determined by Halil Ibrahimi. Specimens of *M. aspersus* were verified by Professor Hans Malicky. The collection is deposited at the Laboratory of Zoology of the Faculty of Natural and Mathematical Sciences, University of Prishtina, Kosovo.

Study area

The territory of Blinajë Hunting area designated as special reserve zone is located in central part of Kosovo, 15 km on the western side of Lypjan town. The total surface of Blinajë special reserve is 5500 ha and stretches in the territory of three municipalities: Lypjan, Shtime and Gllogoc. The altitude within this territory ranges from 670 to 860 m above sea level. There are 33 artificial lakes present inside Blinajë special reserve.

The sampling site (Fig. 1) is located at the spring area of the only stream inside this area which is adjacent to the biggest lake inside Blinajë special reserve (42.5185˚N, 20.9788˚E, and 721 m above sea level).

RESULTS

Family LIMNEPHILIDAE
Mesophylax McLachlan, 1882

Mesophylax aspersus Curtis, 1834

A single adult male specimen of *Mesophylax aspersus* was found in an ultraviolet light trap at the Blinajë Hunting Reserve on August 23rd 2013. This has been a single specimen of this species caught at this locality during a one year monthly sampling of caddisflies with UV light traps and entomological net.

Other species associated with *M. aspersus* in this sample are: *Potamophylax pallidus* (Klapalek, 1899) (10 males, 3 females), *Micropterna nycterobia* McLachlan, 1875 (4 male, 1 female), *Wormaldia occipitalis* (Pictet, 1834) (1 male), *Hydropsyche saxonica* McLachlan, 1884 (2 males) and *Hydropsyche* sp. (5 females); leg. Halil Ibrahimi.

Another male specimen of *M. aspersus* has been caught on September 24th 2014 at the same locality with ultraviolet light trap.

Other species associated with *M. aspersus* in this sample are: *Potamophylax pallidus* (5 males, 2 females), *Micropterna nycterobia* (1 male, 1 female) and *Hydropsyche* sp. (2 females); leg. Halil Ibrahimi.

DISCUSSION AND CONCLUSIONS

In this paper we present first record of *Mesophylax aspersus* from the Republic of Kosovo. This is at the same time first country record of the genus. The distribution of *M. aspersus* ranges from Western Europe, Mediterranean region, Madeira, Canary Islands and up to southwestern Asia (until Cachemira) (Malicky, 1998; Bonada et al., 2004). In the Balkan Peninsula the species is however rare. It has been previously reported from Bulgaria (Kumanski, 1988) but after a revision of this genus (Malicky, 1998), the eastern part of the Balkan Peninsula seems to be inhabited by *M. impunctantus* McLachlan, 1884 and not *M. aspersus* (Kumanski, 1997, 2007).

The distributional area of *M. aspersus* has been considerably expanded by this record. The closest country where this species has been recorded is Bosnia and Herzegovina (Radovanović, 1935). This record is almost eight decades old and in meantime despite detailed investigations in Bosnia and Hercegovina (eg. Marinković-Gospodnetić, 1966, 1970, 1971, 1978; Stanić-Koštroman, 2009), this species hasn't been found any more. In Macedonia, a neighboring country to Kosovo, as in the rest of the eastern part of the Balkan Penin-

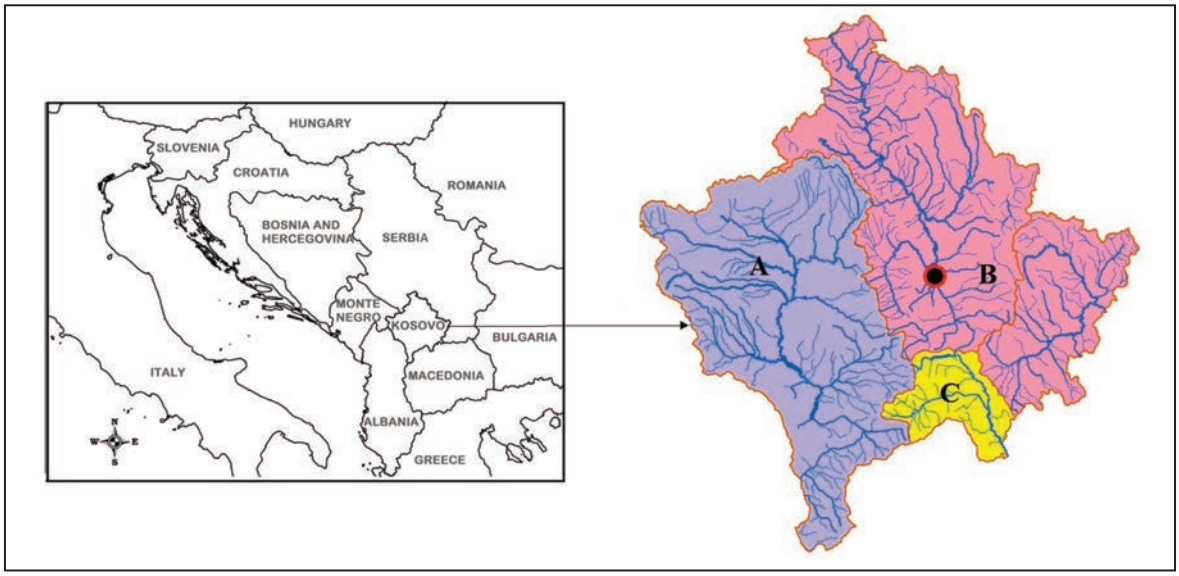

Figure 1. Sampling site in Blinajë Hunting Reserve: A) Adriatic Sea Basin, B) Black Sea Basin, C) Aegean Sea Basin.

sula up to the Western Anatolia is present a subspecies *M. impunctatus aduncus* Navas, 1923 (Kumanski, 1997). Thus, in the continental part of the Balkan Peninsula, Kosovo seems to be the border line between the distribution of *M. aspersus* and *M. impunctatus*.

The species seems to be very rare in Kosovo. More than 100 localities (Ibrahimi, 2011; Ibrahimi et al. 2012 a, 2012 b, 2013) in streams and rivers in all parts of Kosovo were surveyed during the pe riod 2009–2014 for Trichoptera species and currently the Blinajë Hunting Reserve is the only locality where this species has been found. The abundance of *M. aspersus* found in Kosovo also seems to be low. Out of nearly 1100 caddisfly specimens caught during 2013 and 2014 in Blinajë Hunting Reserve, only two specimens belong to *M. aspersus*. This is not the case in other areas around the Mediterranean Sea where this species is present. For example in the Iberian Peninsula the species is quiet abundant (Bonada, 2004).

This record is a further contribution to the inventory of the caddisfly fauna of the Republic of Kosovo which is one of the poorest investigated areas in Europe (Pongrácz, 1923; Marinković-Gospodnetić, 1975, 1980; Malicky, 1986, 1999; Ibrahimi, 2007; Ibrahimi & Gashi, 2008; Ibrahimi et al., 2012 a; Ibrahimi et al., 2012 b; Ibrahimi et al., 2013; Oláh, 2010; Oláh et al., 2013a; Oláh et al., 2013b).

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