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New records of moth flies (Diptera: Psychodidae) from Croatia, with the description of *Berdeniella keroveci* sp.nov.

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Abstract

Berdeniella keroveci sp. nov. is described based on males collected in Croatia. Current knowledge of the psychodid fauna of Croatia is reviewed and new records of 16 species are presented. Short taxonomic notes on *Pericoma pseudocalcilega* Krek, 1972, *Pneumia balkanica* (Krek, 1990), *Pneumia mutua* (Eaton, 1893), *Clogmia albipunctata* (Williston, 1893) and *Lepiseodina tristis* (Meigen, 1810) are given. In total, 33 species of Psychodidae are known to occur in Croatia.

Key words: distribution, faunistics, moth fly, new species, Balkan

Introduction

Psychodidae (moth flies and sand flies) are a diverse group of small flies associated mainly with aquatic habitats. They are easily recognized by their distinct fuzzy appearance, with characteristic wing setation and antennae and erratic flight patterns. The world psychodid fauna includes more than 3000 species (Curler & Moulton 2012), of which approximately 500 are recorded from Europe (Wagner 2004).

In the Balkans, psychodids have been studied most extensively in Bosnia & Herzegovina, from which 118 species are recorded (Krek 1999). Other notable contributions have been made in Slovenia (Ježek 2002), Greece (e.g. Ježek & Goutner 1995), the Former Yugoslav Republic of Macedonia (Krek 1982) and Serbia (Krek 1985). However, little is known about the psychodid fauna of Croatia. Langhoffer (1917) recorded *Peripsychoda fusca* (Macquart, 1826), *Lepiseodina tristis* (Meigen, 1810), *Psychoda alternata* Say, 1824 and *Philosepedon humeralis* (Meigen, 1818) from Zagreb, Petrinja and Bakar; however we do not consider his records reliable because they are given without illustrations and many of the common species were described after he did his work. According to distribution accounts given in Krek (1999) and Wagner (2004), 14 species of Psychodidae have previously been recorded in Croatia. In the present paper, new records of 19 species are given, 16 of which are recorded from Croatia for the first time. Furthermore, the literature is summarised to provide a preliminary checklist of Psychodidae known to occur in Croatia. Finally, a new species, *Berdeniella keroveci* sp. nov. is also described.

Material and methods

Specimens were collected mostly from emergence traps (detailed description in Ivković *et al.* 2012a) and Malaise traps, however some were also handpicked or caught with an aspirator and hand net. Prior to identification, most specimens were macerated in potassium hydroxide (KOH) and mounted in Euparal or Canada balsam. The material is lodged in the University Museum of Bergen. Measurements and figures are based on slide-mounted specimens.

remains almost entirely unsampled and its fauna is likely to be more Mediterranean in character. Due to this habitat richness, Croatia probably is one of the most species-rich countries in Europe and more fieldwork will be necessary to fully understand its fauna.

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