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Short Communication

First record of *Erpobdella concolor* (Annandale, 1913) (Hirudinida: Erpobdellidae) from Greece

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***Abstract*:**
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Erpobdella concolor (Annandale, 1913) was recorded for the first time from a spring in the Peloponnese, Greece. This locality represents the westernmost spot of the species range known so far.

Key words: Hirudinida, Erpobdellidae, *Erpobdella concolor*, Greece, first record

Introduction

Erpobdella concolor (Annandale, 1913) is presumably considered as the East-Mediterranean species (Nesemann & Neubert 1999), but the current knowledge of the geographical distribution of this species is still far from complete. Recently, Grosser & Pešić (2006) revealed possibly the eastern border of range of this species in the Kerman Province in Iran. However, it has not been clear how far the range extends to the west in the Mediterranean region. This research deals with the finding of *Erpobdella concolor* in the Peloponnese, Greece, and establishes the westernmost locality of the species known so far.

Material and methods

On 4th July, 2017, one leech specimen was collected by hand under stones within 10-50 cm off the shore of the small spring (Sentenikos spring, 37°11'31.06"N, 22°21'53.61"E, close to Zoros spring, region of Sparti town) in the central Peloponnese. The specimen was collected by junior author and preserved in 96% ethanol. The specimen is deposited in the collection of senior author.

Results and discussion

The specimen was identified as *Erpobdella concolor* (Annandale, 1913). The anterior part of the body is cylindrical; posteriorly, there are two blunt keels. The body is unicoloured without paramedian stripes. The male genital pore is situated in furrow b2/a2, the female in furrow b5/c11. The genital pores are separated by two annuli. The size of the leech is 13 mm in the length and 3 mm in the width.

The single specimen of *Erpobdella concolor* (Annandale, 1913) from the Peloponnese agree well with the description of Nesemann & Neubert (1999). This species was a long time treated as subspecies of *Dina lineata* (Müller, 1774). However, recent phylogenetic studies (Trontelj & Sket 2000; Siddall 2002) based on morphology and DNA sequence data showed that a revision of the family was necessary because the morphological characters (first the annulation) used to distinguish former erpobdellid

Fig. 1. The westernmost locality of *Erpobdella concolor* (Annandale, 1913): spring in region of Sparti town, Peloponnese, Greece

genera are not informative. For this reason, Siddall (2002) after morphogenetic analysis synonymized all the genera of Erpobdellidae with *Erpobdella*. Furthermore, Siddall (2002) elevated *Erpobdella concolor* to full species status.

According to the most comprehensive revision of the European leeches by Nesemann & Neubert (1999), *Erpobdella concolor* is known from Cyprus, southern Turkey, Syria, Iraq, Israel, Jordan and the northern part of Saudi Arabia. The stream in village Sirch in the Kerman province (SE Iran) represent the easternmost locality of this species (Grosser & Pešić 2006). On other side, our finding in the Peloponnese represent the westernmost spot of the species range known so far. No informations on the ecology of this species are available. We found this species in the Peleponnese under stones of a spring with a stream outflow (Fig. 1). The accompaining fauna includes: *Planorbis atticus* Bourguignat, 1852 (Gastropoda), *Eylais mutila* Koenike, 1897 (Hydrachnidia) and *Scarodytes roberti* Fery, 2011 (Coleoptera). In Greece, two erpobdellid species have been found (see: Nesemann & Neubert 1999): *Erpobdella testacea* (Savigny, 1822) and *E. latestriata* (Nesemann & Neubert, 1995). Additional field work is highly needed for appropriate evaluation of leech biodiversity in Greece as well the extant distribution of *Erpobdella concolor*.

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