

# Earthworm fauna of the western Mazandaran province, Iran

(Oligochaeta: Lumbricidae, Megascolecidae)

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**Abstract.** In the present study, earthworms were collected from the margins of rivers, forests, and wetlands of the Western Mazandaran province, Iran, from April 2007 to April 2008 at 18 designated stations. The following ten species were identified: *Aporrectodea caliginosa*, *Ap. jassyensis*, *Dendrobaena byblica* complex, *D. hortensis*, *D. octaedra*, *D. veneta*, *Eisenia fetida*, *Eiseniella tetraedra*, *Perelia kaznakovi* (all family Lumbricidae) and *Amyntas corticis* (family Megascolecidae). The *Ei. tetraedra* species comprises a new record for the studied region.

**Key words:** Earthworm, Lumbricidae, Megascolecidae, Mazandaran province, Iran.

## Introduction

The study of earthworms has been neglected in many regions of the Middle-East, especially in Iran. In the only taxonomic study on Iranian earthworms, 20 species were recorded (OMRANI 1973). Unfortunately, no other study on the earthworm biodiversity in Iran has been carried out. Other studies on earthworms in Iran have been limited to earthworm ecology and vermicomposting (OMRANI et al. 2005), waste management (YAGHMAEIAN et al. 2005, SHAHMANSOURI et al. 2005) and heavy metal bioaccumulation in vermicomposting (SHAHMANSOURI et al. 2005). Therefore, the aim of the present study is to continue and extend the earthworm faunistic survey in Iran.

## Material and methods

Mazandaran province is located on the southern coast of the Caspian Sea and along the northern part of the Alborz Mountain range. It lies between 50°15'E and 56°15'E and between 35°45'N and 38°15'N. The province is characterized by a moderate and humid climate. Earthworm collections were carried out at 18 stations (Fig. 1) using hand-sorting, digging, and the diluted formalin method (PAVLÍČEK & CSUZDI 2005) from April 2007 to April 2008.

Earthworms were found in wet soil, including litter mould on the forest floor, under logs and stones, under bark of dead trees, inside rotting logs, and in decaying plants. Collected earthworms were anaesthetized and preserved in 15% and 75% ethanol, respectively, then transferred to 4% formalin, and after several days preserved in 75% ethanol (PAVLÍČEK & CSUZDI 2005). Earthworms were identified using available keys (CSUZDI & ZICSI 2003) and deposited in the invertebrate collection at the Zoological Museum, University of Tehran (ZUTC).