

# A PRELIMINARY STUDY ON EARTHWORMS (OLIGOCHAETA, LUMBRICIDAE) OF BURSA CITY

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## SUMMARY

This preliminary study was done to understand earthworm species which live in Bursa city. Specimens collected from five localities were examined. At the end of the study, four species belonging to four genera were determined: *Octodrilus complanatus*, *Aporrectodea caliginosa caliginosa*, *Proctodrilus tuberculatus* and *Lumbricus rubellus*.

Keywords: *Turkish earthworms, Lumbricidae, Bursa city, Fauna of Turkey.*

## BURSA İLİ TOPRAKSOLUCANLARI (OLIGOCHAETA, LUMBRICIDAE) ÜZERİNE BİR ÖN ÇALIŞMA

### ÖZET

Bu ön çalışma Bursa ilinde yaşayan topraksolucanı türlerinin anlaşılması amacıyla yapılmıştır. Çalışmada beş lokaliteden alınan topraksolucanı örnekleri incelenmiştir. Çalışma sonunda *Octodrilus complanatus*, *Aporrectodea caliginosa caliginosa*, *Proctodrilus tuberculatus* ve *Lumbricus rubellus* olmak üzere dört cins'e ait dört tür tespit edilmiştir.

Anahtar Kelimeler: *Türkiye topraksolucanları, Lumbricidae, Bursa İli, Türkiye Faunası.*

### 1. INTRODUCTION

Bursa is one of the largest cities in the Marmara Region of Turkey and our knowledge is limited concerning its earthworm fauna. About two dozen of articles have been published on Turkish earthworms up to now [6, 7, 8] and the results are far from presenting a complete knowledge of the earthworms of Bursa City.

The purpose of this paper is to present a list of the earthworm species in the city.

### 2. MATERIAL AND METHODS

The samples were collected by digging and hand sorting. Fixation and conservation used 70% ethanol.

### 3. RESULTS

#### Collecting sites and finding species:

1. Nilüfer, garden of an apartment, near the onion planted area, 04.11.2002.

*Octodrilus complanatus* (Dugès, 1828) 1 adult + 1 juvenile.

2. Görükle Campus of Uludağ University, among the pine trees, wet soil, 03.12.2002.

*Lumbricus rubellus* Hoffmeister, 1843 2 adults + 6 juveniles.

3. Emir Sultan Graveyard, wet soil, 06.12.2002.

*Octodrilus complanatus* (Dugès, 1828) 1 adult + 1 juvenile.

*Proctodrilus tuberculatus* (Černosvitov, 1935) 3 adults.

4. Nilüfer, a garden among apartments, in an onion planted area, 09.12.2002.

*Octodrilus complanatus* (Dugès, 1828) 3 adults + 1 juvenile.

*Aporrectodea caliginosa caliginosa* (Savigny, 1826) 3 adults.

5. Nilüfer, house garden, lettuce planted and muddy area, 09.12.2002.

*Octodrilus complanatus* (Dugès, 1828) 1 adult.

*Proctodrilus tuberculatus* (Černosvitov, 1935) 2 adults.

*Aporrectodea caliginosa caliginosa* (Savigny, 1826) 2 adults.

#### 4. DISCUSSION

This preliminary study was done by collecting some samples from several localities of Bursa City. At the end of the examination, four species belonging to four genera were determined.

*Octodrilus complanatus* is the most common species among the collected material. In Turkey, this circummediterranean species [1, 8] is known from Marmara and Mediterranean Regions especially [4, 5, 9] and its existence in the Bursa City is an expected result.

*Aporrectodea caliginosa caliginosa* was found in locality 5. It is known that it prefers gardens and riversides ecologically [2, 3]. It was also recorded from gardens in this study.

*Proctodrilus tuberculatus* was recorded from Marmara, Inner and Mediterranean parts of Anatolia previously. It is known that this species can be found in grassy and wet areas [4, 5]. Features of locality 3 and 5 which that species was found confirm this knowledge.

Previous studies in Turkey showed that *Lumbricus rubellus* is one of the most common species in Anatolia [4, 5, 6, 7, 8] and it can be found in different habitats like riversides, gardens, parks, underneath stones and mosses [2, 3]. In this study, it was collected from wet soil among the trees.

Undoubtedly, results of this study which were done by specimens collected from only several localities are insufficient to enlighten complete fauna of Bursa City. We need to collect more specimens from additional localities to clarify the earthworm species in this city.

Our knowledge is still limited about earthworms in some parts of Anatolia. Therefore, we thought every faunistic study will be helpful to complete the fauna of Turkey. We hope these results will be helpful to understanding the diversity of species in Bursa City, Marmara Region and Anatolia.

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