

A preliminary checklist of the Oligochaeta of Belgian inland waters

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Abstract

A preliminary checklist of the Belgian Oligochaeta, belonging to the Lumbriculidae, Haplotaxidae, Naididae, Tubificidae and Aelosomatidae is here presented. A total of 48 species has been reported in 24 publications. It appears that the fauna of saline surface waters and the limnic cave fauna's have been studied in some detail, whereas other surface waters have only very briefly been sampled.

Key-words : Oligochaeta, inland waters, checklist, Belgium.

Résumé

Une liste faunistique des Oligochètes de Belgique est présentée, concernant les familles suivantes : Lumbriculidae, Haplotaxidae, Naididae, Tubificidae et Aelosomatidae. Le nombre total s'élève à 48 espèces mentionnées dans 24 publications. Ceci révèle que la faune aquatique des grottes et des eaux saumâtres a été étudiée en détail, tandis que d'autres eaux de surface n'ont été échantillonées que sommairement.

Mots-clés : Oligochaeta, eaux continentales, liste faunistique, Belgique.

Introduction

The present checklist compiles faunistic data of the aquatic Oligochaeta collected in Belgium. However, only species pertaining to the following 5 families are included : Lumbriculidae, Haplotaxidae, Naididae, Tubificidae and Aelosomatidae. According to the definition of the Class Oligochaeta by BRINKHURST & JAMIESON (1971), the family Aelosomatidae does not belong to this group, but rather to the Class Aphanoneura (Superclass Aclitellata) (see also BRINKHURST & NEMEC, 1987). Although fully accepting these views, I will still include the two Belgian *Aelosoma* species in the present list, mainly for historical reasons. Following BRINKHURST & JAMIESON (loc. cit.) and BRINKHURST (1978), species of respectively the Lumbricidae and the Enchytraeidae are not included here, although representatives of these, mainly terrestrial, families are generally distributed in various waterbodies. Finally, the nomenclature and taxonomy applied here, was adopted from BRINKHURST & JAMIESON (loc. cit.), BRINKHURST & WETZEL (1984) and BRINKHURST (1985, 1986).

There are 24 publications reporting on a total of 48 Belgian aquatic oligochaete species. Several of these

papers, however, do not present new faunistic data, but rather constitute reviews of earlier publications (e.g. CERNOSVITOV 1939, WOLF 1937, LELOUP & KONIETZKO 1956, LERUTH 1939). Also, for some of the species reported here, it remains doubtful if they were actually ever found in Belgium. TETRY (1940) presented a catalogue of Belgian Oligochaeta (aquatic and terrestrial), in which both new identifications (from about 200 localities) and data from earlier publications were compiled. Four aquatic species cited by TETRY (1940 : 16-17), however, were not found by her, nor could they be retrieved in the older literature. The origin of these citations thus remains unknown, and the said species are therefore listed with a question mark.

The present checklist gives the known species of Belgian non-marine aquatic Oligochaeta, together with their synonymies used in the literature on the Belgian fauna. Numbers listed after the species names refer to the publications in which the species are cited (see bibliography).

The Belgian aquatic Oligochaeta appear extremely ill known and only saline waters and waterbodies in caves have been studied in some detail. Other surface waters have only briefly been sampled and more than 50% of the Belgian species is reported from one locality only. It appears that *Stylaria lacustris* (LINNAEUS, 1776) and *Tubifex tubifex* (O.F. MULLER, 1774) are the most common species.

A similar review for the aquatic Oligochaeta of the Netherlands has yielded a total of 77 species belonging to the 5 families here considered (MOL, 1984). BRINKHURST (1978) reported approximately 100 species from the different zoogeographical subregions of Western Europe. We can thus conclude that a broad faunistic survey will yield a large number of new species for the Belgian fauna.

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Checklist

Family Lumbriculidae

<i>Lumbriculus variegatus</i> (O.F. MULLER, 1774)	13/15/20/23
<i>Trichodrilus cernosvitovi</i> HRABE, 1937	6/11/18
<i>Trichodrilus leruthi</i> HRABE, 1937	6/11/18
<i>Stylodrilus heringianus</i> CLAPAREDE, 1862	3/18/22/23/ 24
<i>Stylodrilus lankesteri</i> (VEJDOKSKY, 1877) partim syn. : <i>Euaxes obtusirostris</i> MENGE syn. : <i>Rhynchelmis obtusirostris</i> (MENGE)	13/20
<i>Rhynchelmis limosella</i> HOFFMEISTER, 1843	13/15/20/23

Family Haplotaxidae

<i>Haplotaxis gordioides</i> (HARTMANN, 1821) syn. : <i>Phreoryctes gordioides</i>	5/6/11/17/ 18/22/23
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Family Naididae

<i>Chaetogaster diastrophus</i> (GRUITHUISEN, 1828) partim syn. : <i>C. vermicularis</i> O.F. MULLER, 1773	13/20/22/23
<i>Chaetogaster langi</i> BRETSCHER, 1896	1/3/6/18/ 23/24
<i>Chaetogaster diaphanus</i> (GRUITHUISEN, 1828)	1/13/20/22
? <i>Chaetogaster crystallinus</i> VEJDOKSKY, 1883	22/23
<i>Chaetogaster limnaei</i> VON BAER, 1827	13/23
<i>Paranais litoralis</i> (O.F. MULLER, 1784)	12/14/16
<i>Uncinaria uncinata</i> (OERSTED, 1842) syn. : <i>Paranais uncinata</i>	15
<i>Ophidonaia serpentina</i> (O.F. MULLER, 1773)	13/14/20/22/ 23
<i>Nais communis</i> PIGUET, 1906	6/11
<i>Nais variabilis</i> PIGUET, 1906	3/6/18/22/ 23/24

<i>Nais elinguis</i> O.F. MULLER, 1773	6/11/12/13/ 16/20
<i>Nais barbata</i> O.F. MULLER, 1773 syn.: <i>N. obtusata</i> (GERVAIS, 1838)	1/13/20
<i>Nais bretschieri</i> MICHAELSEN, 1899	5/6
<i>Nais pardalis</i> PIGUET, 1906	1/5/6
<i>Slavina appendiculata</i> d'UDEKEM, 1855	13/20/23
<i>Stylaria lacustris</i> (LINNAEUS, 1776)	1/10/13/15/ 20/23
<i>Dero (Dero) digitata</i> (O.F. MULLER, 1773) syn. : <i>Dero (Dero) limosa</i> LEIDY, 1852	1/13/23
<i>Dero (Dero) obtusa</i> d'UDEKEM, 1855	13/23
? <i>Dero (Aulophorus) furcatus</i> (O.F. MULLER, 1773)	23
<i>Pristina aequiseta</i> BOURNE, 1891	1
<i>Pristina longiseta</i> EHRENBERG, 1828	13/20/23
<i>Pristina bilobata</i> (BRETSCHER, 1903)	3/6/18/23/24
<i>Pristinella rosea</i> (PIGUET, 1906) partim syn. : <i>P. lutea</i> (SCHMIDT, 1847)	23
Family Tubificidae	
<i>Tubifex tubifex</i> (O.F. MULLER, 1774) syn. : <i>Tubifex rivulorum</i> LAMARCK, 1816	1/3/4/6/12/ 13/16/18/20/ 22/23/24
<i>Tubifex nerthus</i> MICHAELSEN, 1908	23
<i>Tubifex costatus</i> (CLAPAREDE, 1863)	12/14/16
<i>Limnodrilus hoffmeisteri</i> CLAPAREDE, 1862	1
<i>Limnodrilus udekemianus</i> CLAPAREDE, 1862	1/23
<i>Limnodrilus claparedeianus</i> RATZEL, 1868	1
<i>Psammoryctides barbatus</i> (GRUBE, 1861) syn. : <i>Tubifex barbatus</i>	22/23
<i>Psammoryctides albicola</i> (MICHAELSEN, 1901) syn. : <i>Tubifex albicola</i>	23
<i>Spirosperma velutinus</i> (GRUBE, 1879) syn. : <i>Tubifex velutinus</i> syn. : <i>Peloscolex velutinus</i>	3/6/18/22/ 23/24
? <i>Spirosperma ferox</i> EISEN, 1879 syn. : <i>Peloscolex ferox</i>	23
<i>Tubificoides benedeni</i> (d'UDEKEM, 1855) syn. : <i>Peloscolex benedeni</i> syn. : <i>Tubifex benedeni</i> partim syn. : <i>Clitellio arenarius</i> (O.F. MULLER, 1776)	13/14/20/23

<i>Tubificoides heterochaetus</i>	
(MICHAELSEN, 1926)	12/16
syn. : <i>Peloscolex heterochaetus</i>	
syn. : <i>Limnodrilus heterochaetus</i>	
<i>Aulodrilus limnobioides</i>	
BRETSCHER, 1899	3/6/18/23/24
? <i>Rhyacodrilus falciformis</i>	
BRETSCHER, 1901	23
<i>Branchiura sowerbyi</i>	2/7/8/15/19/
BEDDARD, 1892	22/23
<i>Clitellio arenarius</i>	
(O.F. MULLER, 1776)	14/20/23

syn. : *Tubifex hyalinus*
d'UDEKEM, 1855

Family Aelosomatidae

<i>Aelosoma hemprichi</i>	
EHRENBERG, 1828	1/13/20/23
syn. : <i>A. ehrenbergi</i>	
OERSTEDT, 1842	
<i>Aelosoma quaternarium</i>	
EHRENBERG, 1831	9/13/20

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