

Check-list of marine Ostracoda (Crustacea) of Belgium

by Karel WOUTERS

Abstract

A check-list of marine Ostracoda of Belgium is presented for the first time. Thus far, 57 species (belonging to 33 genera), have been found. The list is based on data from the literature and on collections in the Royal Belgian Institute of Natural Sciences, Brussels. With a few exceptions, these collections consist of empty valves (or carapaces) collected from beach sands. Information on the real occurrences of the species living in the Belgian part of the North Sea is lacking.

Key-words: Ostracoda, marine environment, check-list, Belgium.

Introduction

There are only very few papers dealing with the study of marine Ostracoda of Belgium. The most important contribution was published by BRADY (1869), describing fifteen marine and some brackish and freshwater ostracods from the River Scheldt in Antwerp. In a later publication BRADY & ROBERTSON (1870) listed these species again and added thirty-three species from the river Scheldt, in an overview of Ostracoda and Foraminifera of tidal rivers.

Subsequent papers, such as LAMEERE (1895) and MAITLAND (1897) are entirely based on the ostracods described from the River Scheldt. More than a century after BRADY, WOUTERS (1975) added four more species to the Belgian marine fauna. From this bibliographical review it appears clearly that research on marine ostracods of Belgium is only in an embryological state.

The here presented check-list is based on the publications of BRADY (1869), BRADY & ROBERTSON (1870), WOUTERS (1975) and HEIP (1976 a,b) and on specimens deposited in the collections of the Royal Belgian Institute of Natural Sciences in Brussels, by the present author. For the identification and taxonomy of

the species the fauna of ATHERSUCH, HORNE & WHITTAKER (1989) was used.

Check-list of marine Ostracoda of Belgium

Classis OSTRACODA LATREILLE, 1806

Subclassis Podocopa SARS, 1866

Ordo Podocopida SARS, 1866

SUBORDO CYPRIDOCOPINA BAIRD, 1845

Superfamilia Pontocypridoidea MÜLLER, 1894

Familia Pontocyprididae G.W. MÜLLER, 1894

Genus *Propontocypris* SYLVESTER-BRADLEY, 1947

Propontocypris trigonella (SARS, 1866)

SUBORDO BAIRDIOCOPINA SARS, 1887

Superfamilia BAIRDIOIDEA SARS, 1887

Familia BAIRDIIDAE SARS, 1887

Genus *Aponesidea* MADDOCKS, 1986

Aponesidea acanthigera (BRADY, 1868)

SUBORDO CYTHEROCOPINA BAIRD, 1850

Superfamilia CYTHEROIDEA BAIRD, 1850

Familia CYTHERIDAE BAIRD, 1850

Genus *Cythere* O.F. MÜLLER, 1785

Cythere lutea O.F. MÜLLER, 1785

Genus *Cytheromorpha* HIRSCHMANN, 1909

Cytheromorpha fuscata (BRADY, 1869)

Genus *Microcytherura* G.W. MÜLLER, 1894

Microcytherura boulangieri ROME, 1956

Microcytherura fulva (BRADY & ROBERTSON, 1874)

Familia EUCYTHERIDAE PURI, 1954

Genus *Eucythere* BRADY, 1868

Eucythere declivis (NORMAN, 1865)

Eucythere prava BRADY & ROBERTSON, 1869

- Familia Leptocytheridae HANAI, 1957
 Genus *Callistocythere* RUGGIERI, 1953
Callistocythere littoralis (G.W. MÜLLER, 1894)
 Genus *Leptocythere* SARS, 1925
 Leptocythere baltica Klie, 1929
 Leptocythere castanea (SARS, 1866)
Leptocythere lacertosa (HIRSCHMANN, 1912)
Leptocythere macallana (BRADY & ROBERTSON, 1869)
 Leptocythere pellucida (BAIRD, 1850)
 Leptocythere porcellanea (BRADY, 1869)
Leptocythere psammophila GUILLAUME, 1976
 Leptocythere tenera (BRADY, 1868)
- Familia Cytherideidae SARS, 1925
 Genus *Cyprideis* JONES, 1857
 Cyprideis torosa (JONES, 1850)
- Familia Neocytherideidae PURI, 1957
 Genus *Neocytherideis* PURI, 1952
Neocytherideis subulata (BRADY, 1868)
 Genus *Sahnicythere* ATHERSUCH, 1982
 Sahnicythere retroflexa (KLINE, 1936)
 Familia Cushmanidae PURI, 1974
 Genus *Pontocythere* DUBOWSKY, 1939
 Pontocythere elongata (BRADY, 1868)
- Familia Trachyleberididae SYLVESTER-BRADLEY, 1948
 Genus *Costa* NEVIANI, 1928
 Costa runcinata (BAIRD, 1850)
- Familia Hemicytheridae PURI, 1953
 Genus *Hemicythere* SARS, 1925
 Hemicythere villosa (SARS, 1866)
 Genus *Heterocythereis* ELOFSON, 1941
Heterocythereis albomaculata (BAIRD, 1838)
 Genus *Aurila* POKORNY, 1955
 Aurila convexa (BAIRD, 1850)
- Genus (Subgenus) *Finmarchinella* (*Finmarchinella*) SWAIN, 1963
 Finmarchinella (*Finmarchinella*) *finmarchica* (SARS, 1866)
 Genus (Subgenus) *Finmarchinella* (*Barentsovia*) NEALE, 1974
Finmarchinella (*Barentsovia*) *angulata* (SARS, 1866)
 Genus *Urocythereis* RUGGIERI, 1950
 Urocythereis britannica ATHERSUCH, 1977
- Familia Loxoconchidae SARS, 1925
 Genus *Loxoconcha* SARS, 1866
Loxoconcha rhomboidea (FISCHER, 1855)
 Loxoconcha elliptica BRADY, 1868
 Genus *Bonnyannella* ATHERSUCH, 1982
- Bonnyannella robertsoni* (BRADY, 1868)
 Genus *Elofsonia* WAGNER, 1957
Elofsonia pusilla (BRADY & ROBERTSON, 1870)
 Genus *Palmoconcha* SWAIN & GILBY, 1974
 Palmoconcha laevata (NORMAN, 1865)
 Genus *Hirschmannia* ELOFSON, 1941
Hirschmannia viridis (O.F. MÜLLER, 1785)
- Familia Cytheruridae G.W. MÜLLER, 1894
 Genus *Hemicytherura* ELOFSON, 1941
Hemicytherura cellulosa (NORMAN, 1865)
 Hemicytherura clathrata (SARS, 1866)
 Genus *Semicytherura* WAGNER, 1957
Semicytherura acuticostata (SARS, 1866)
Semicytherura angulata (BRADY, 1868)
Semicytherura cornuta (BRADY, 1868)
Semicytherura nigrescens (BAIRD, 1838)
 Semicytherura sella (SARS, 1866)
 Semicytherura striata (SARS, 1866)
 Semicytherura undata (SARS, 1866)
 Genus *Cytheropteron* SARS, 1866
- Cytheropteron depressum* (BRADY & NORMAN, 1889)
Cytheropteron latissimum (NORMAN, 1865)
Cytheropteron nodosum BRADY, 1868
- Familia Xestoleberididae SARS, 1928
 Genus *Xestoleberis* SARS, 1866
Xestoleberis aurantia (BAIRD, 1838)
Xestoleberis depressa SARS, 1865
- Familia Bythocytheridae SARS, 1866
 Genus *Bythocythere* SARS, 1866
 Bythocythere bradyi SARS, 1926
 Genus *Sclerochilus* SARS, 1866
- Sclerochilus abbreviatus* BRADY & ROBERTSON, 1869
Sclerochilus contortus (NORMAN, 1861)
- Familia Paradoxostomatidae BRADY & NORMAN, 1889
 Genus *Paradoxostoma* FISCHER, 1855
Paradoxostoma abbreviatum SARS, 1866
Paradoxostoma angliorum HORNE & WHITTAKER, 1985
Paradoxostoma ensiforme BRADY, 1868
Paradoxostoma variabile (BAIRD, 1835)
 Genus *Cytherois* G.W. MÜLLER, 1894
 Cytherois fischeri (SARS, 1866)
 Genus *Paracytherois* G.W. MÜLLER, 1894
 Paracytherois flexuosa (BRADY, 1867)

Comments

1. GENERAL

The present list is based on data from the literature and on specimens deposited in the collections of the Royal Belgian Institute of Natural Sciences in Brussels. With a few exceptions, all specimens are empty valves (or carapaces) collected from beach sands along the coast. This diminishes to some extent the value of this list, because information on the real occurrences of the species living in the Belgian part of the North Sea is lacking. It is felt, however, that in absence of an updated check-list of marine ostracods of Belgium, the present list deserves to be published, no matter how incomplete or preliminary it may be.

The check-list of marine ostracods of Belgium now contains 57 species (belonging to 33 genera). In a previous paper, WOUTERS (1989) listed 72 species of non-marine ostracods, bringing the total number of marine and freshwater ostracod species of Belgium to 129.

2. SPECIFIC

Propontocypris trigonella (SARS, 1866): BRADY & ROBERTSON, 1870.

Aponesidea acanthigera (BRADY, 1868) (new combination): in coll.

The species was described as *Bairdia acanthigera* from southwestern England by BRADY (1868, p. 390). In the World Register of Marine Species (WoRMS) it is listed as *Neonesidea acanthigera* (BRADY). When compared with other species, such as *Aponesidea iliffei* MADDOCKS, 1986, the type species of the genus *Aponesidea* MADDOCKS, 1986, and with related species such as *Aponesidea ifatyensis* MADDOCKS, 1991 and *Aponesidea* sp. A and *Aponesidea* sp. B of JELLINEK 1993 it can be concluded that there are a number of similarities in the shape of the valves, the flattened ventral side and the marginal spines, less so, however, in the muscle scar pattern. Because of these overall similarities the species is assigned here to the genus *Aponesidea*.

Cythere lutea O.F. MÜLLER, 1785: WOUTERS, 1975.

Cytheromorpha fuscata (BRADY, 1869): BRADY, 1869, type locality: River Scheldt, Antwerp (Belgium), see also BOOMER & HORNE, 1991; BRADY & ROBERTSON, 1870.

Microcytherura boulangei ROME, 1956: in coll.

This species was found alive in the nature reserve "Het Zwin", a marine inlet in NW Belgium and SW Netherlands. Specimens with appendages were collected on the Dutch side, ca 45 m from the border between Belgium and the Netherlands. Because a part of the inlet is also on Belgian territory, the species is assumed to belong also to the Belgian fauna, although not yet sampled there. This is the first record of the species after the original description by ROME (1956), who collected this interstitial species in the *Arenicola*-zone of the Boulonnais (Pas-de-Calais, NW France). This is also the first record of the species for the Netherlands.

Microcytherura fulva (BRADY & ROBERTSON, 1874): in coll.

Eucythere declivis (NORMAN, 1865): BRADY & ROBERTSON, 1870; WOUTERS, 1975.

Eucythere prava BRADY & ROBERTSON, 1869: in coll.

Callistocythere littoralis (G.W. MÜLLER, 1894): BRADY & ROBERTSON, 1870; WOUTERS, 1975.

Leptocythere baltica KLINE, 1929: BRADY, 1869 (pars), see also HORNE & WHITTAKER, 1985a.

Leptocythere castanea (SARS, 1866): BRADY, 1869; BRADY & ROBERTSON; 1870, WOUTERS, 1975; in coll.

Leptocythere lacertosa (HIRSCHMANN, 1912): in coll.

Leptocythere macallana (BRADY & ROBERTSON, 1869): in coll.

Leptocythere pellucida (BAIRD, 1850): BRADY, 1869; BRADY & ROBERTSON, 1870; in coll.

Leptocythere porcellanea (BRADY, 1869): BRADY, 1869, type locality: River Scheldt, Antwerp (Belgium), see also HORNE & WHITTAKER, 1985b; BRADY & ROBERTSON, 1870; WOUTERS, 1975.

Leptocythere psammophila GUILLAUME, 1976: in coll.

Leptocythere tenera (BRADY, 1868): BRADY & ROBERTSON, 1870; in coll.

Cyprideis torosa (JONES, 1850): BRADY, 1869; BRADY & ROBERTSON; 1870, WOUTERS, 1975; HEIP, 1976 a,b; in coll.

- Neocytherideis subulata* (BRADY, 1868): BRADY, 1869; BRADY & ROBERTSON, 1870; in coll.
- Sahnicythere retroflexa* (KLIE, 1936): WOUTERS, 1975.
- Pontocythere elongata* (BRADY, 1868): BRADY & ROBERTSON, 1870; WOUTERS, 1975; in coll.
- Costa runcinata* (BAIRD, 1850): BRADY & ROBERTSON, 1870.
- Hemicythere villosa* (SARS, 1866): BRADY, 1869; BRADY & ROBERTSON; 1870, WOUTERS, 1975; in coll.
- Heterocythereis albomaculata* (BAIRD, 1838): in coll.
- Aurila convexa* (BAIRD, 1850): BRADY & ROBERTSON, 1870 ; WOUTERS, 1975 ; in coll.
- Finmarchinella (Finmarchinella) finmarchica* (SARS, 1866) : BRADY & ROBERTSON, 1870 ; in coll.
- Finmarchinella (Barentsovia) angulata* (SARS, 1866): in coll.
- Urocythereis britannica* ATHERSUCH, 1977: in coll.
- Loxoconcha rhomboidea* (FISCHER, 1855): BRADY & ROBERTSON, 1870 ; WOUTERS, 1975; in coll.
- Loxoconcha elliptica* BRADY, 1868: BRADY, 1869; BRADY & ROBERTSON, 1870; WOUTERS, 1975, in coll.
- Bonnyannella robertsoni* (BRADY, 1868): in coll.
- Elofsonia pusilla* (BRADY & ROBERTSON, 1870): BRADY & ROBERTSON, 1870.
- Palmoconcha laevata* (NORMAN, 1865): BRADY & ROBERTSON, 1870; in coll.
- Hirschmannia viridis* (O.F. MÜLLER, 1785): BRADY, 1869; BRADY & ROBERTSON, 1870; WOUTERS, 1975, in coll.
- Hemicytherura cellulosa* (NORMAN, 1865): BRADY, 1869; BRADY & ROBERTSON, 1870; WOUTERS, 1975.
- Hemicytherura clathrata* (SARS, 1866): in coll.
- Semicytherura acuticostata* (SARS, 1866): BRADY, 1869; WOUTERS, 1975; in coll.
- Semicytherura angulata* (BRADY, 1868): BRADY & ROBERTSON; in coll.
- Semicytherura cornuta* (BRADY, 1868): BRADY & ROBERTSON, 1870; in coll.
- Semicytherura nigrescens* (BAIRD, 1838): BRADY & ROBERTSON, 1870; in coll.
- Semicytherura sella* (SARS, 1866): BRADY, 1869; BRADY & ROBERTSON, 1870; WOUTERS, 1975.
- Semicytherura striata* (SARS, 1866): BRADY & ROBERTSON, 1870; WOUTERS, 1975; in coll.
- Semicytherura undata* (SARS, 1866): BRADY & ROBERTSON, 1870.
- Cytheropteron depressum* (BRADY & NORMAN, 1889)
- Cytheropteron latissimum* (NORMAN, 1865): BRADY & ROBERTSON, 1870; in coll.
- Cytheropteron nodosum* BRADY, 1868 : WOUTERS, 1975.
- Xestoleberis aurantia* (BAIRD, 1838): BRADY, 1869; BRADY & ROBERTSON, 1870; WOUTERS, 1975.
- Xestoleberis depressa* SARS, 1865: in coll.
- Bythocythere bradyi* SARS, 1926: in coll.
- Sclerochilus abbreviatus* BRADY & ROBERTSON, 1869: BRADY & ROBERTSON, 1870.
- Sclerochilus contortus* (NORMAN, 1861): WOUTERS, 1975.
- Paradoxostoma abbreviatum* SARS, 1866: BRADY & ROBERTSON, 1870.
- Paradoxostoma angliorum* HORNE & WHITTAKER, 1985: in coll.
- Paradoxostoma ensiforme* BRADY, 1868: BRADY & ROBERTSON, 1870.
- Paradoxostoma variabile* (BAIRD, 1835): BRADY, 1869; BRADY & ROBERTSON, 1870.
- Cytherois fischeri* (SARS, 1866): BRADY & ROBERTSON, 1870; WOUTERS, 1975.

Paracytherois flexuosa (BRADY, 1867): BRADY & ROBERTSON, 1870.

References

BELGIAN OSTRACODA:

BRADY, G.S., 1869. Contributions to the study of the Entomostraca. No IV. Ostracoda from the River Scheldt and the Grecian Archipelago. *Annals and Magazine of Natural History, 4th Series*, 3: 45-50.

BRADY, G.S. & ROBERTSON, D., 1870. The Ostracoda and Foraminifera of tidal rivers. *Annals and Magazine of Natural History, 4th Series*, 6: 1-33.

HEIP, C., 1976a. The life-cycle of *Cyprideis torosa* (Crustacea, Ostracoda). *Oecologia (Berlin)*, 24: 229-245.

HEIP, C., 1976b. The spatial pattern of *Cyprideis torosa* (Jones, 1850) (Crustacea, Ostracoda). *Journal of the marine biological Association of the U.K.*, 56: 179-189.

LAMEERE, A., 1895. Manuel de la faune de Belgique. Tome 1, Animaux non insectes. Bruxelles, H. Lamertin, Librairie-Editeur, 640 p. (Ostracoda: p. 529-534).

MAITLAND, R.T., 1897. Prodrome de la faune des Pays-Bas et de la Belgique Flamande. Uitgave Boekhandel en Drukkerij voorheen Brill, Leiden, 62 p. (Ostracoda: p. 39).

WOUTERS, K., 1975. De Ostracoda in de recente sedimenten van de Spuikom (Oostende). *Mededelingen en Informatie Instituut voor Zeewetenschappelijk Onderzoek*, 5 (1-2): 34-41.

OTHER REFERENCES:

ATHERSUCH, J., HORNE, D.J. & WHITTAKER, J.E., 1989. Marine and brackish water ostracods. *Synopses of the British Fauna (New Series)*, 43: 1-343, 7 plates.

BOOMER, I. & HORNE, D.J., 1991. On *Cytheromorpha fuscata* (Brady). *Stereo-Atlas of Ostracod Shells*, 18 (13): 49-56

BRADY, G.S., 1868. A monograph of the Recent British Ostracoda. *Transactions of the Linnean Society of London*, 26 (2): 353-495.

HORNE, D.J. & WHITTAKER, J.E., 1985a. On *Leptocythere baltica* KLIE. *Stereo-Atlas of Ostracod Shells*, 12(18): 93-98.

HORNE, D.J. & WHITTAKER, J.E., 1985b. On *Leptocythere porcellanea* (Brady). *Stereo-Atlas of Ostracod Shells*, 12(19): 99-106.

JELLINEK, T., 1993. Zur Ökologie und Systematik rezenter Ostracoden aus dem Bereich des kenianischen Barriere-Riffs. *Senckenbergiana lethaea*, 73 (1): 83-225.

MADDOCKS, R.M., 1991. New Bairdiidae (Ostracoda) from Tulear, Madagascar. *Journal of Micropalaeontology*, 9 (2): 189-204.

MADDOCKS, R.M. & ILIFFE, T.M., 1986. Podocopid Ostracoda of Bermudian Caves. *Stygologia*, 2 (1/2): 26-76.

ROME, D.R., 1956. Note sur des ostracodes du Pas-de-Calais. *Microcytherura boulangei* sp. nov. de la faune interstitielle. *Bulletin Institut royal des Sciences naturelles de Belgique*, 32 (38): 1-12.

WOUTERS, K., 1989. Check-list of the recent non-marine Ostracoda (Crustacea) of Belgium. In: WOUTERS, K. & BAERT, L. (Eds), Proceedings of the Symposium "Invertebrates of Belgium": 153-158, Royal Belgian Institute of Natural Sciences, Brussels.

Karel WOUTERS
Department of Invertebrates
Royal Belgian Institute of Natural Sciences
Vautierstraat 29
1000 Brussels, Belgium