

ensifer Fischer, 1860
finmarchica (Sars, 1905)
furcata subsp. *furcata* (Baird, 1837)
gigantea Volkmann, 1979
gracilis (T Scott, 1895)
graciloides (Sars, 1920)
histriana Marcus & Por, 1961
holothuriae Humes, 1957
inflatiseta Volkmann, 1979
lagunaris Volkmann-Rocco, 1972
longicornis (T & A Scott, 1895)
longisetosa Gurney, 1927
marmorata Volkmann-Rocco, 1973
minor (T & A Scott, 1896)
palaeocrystica (Norman, 1878)
pentataenia Volkmann-Rocco, 1973
perplexa Volkmann, 1979
persimilis Volkmann-Rocco & Fava, 1969
pontina Volkmann-Rocco, 1969
pori Betouhim-El & Kahan, 1972
reluctans Volkmann-Rocco, 1968
remanei Volkmann, 1975
reticulata Bocquet, 1951
similis Kricagin, 1873
tenella (Sars, 1911)
tenera (Sars, 1905)
varipes Marcus, 1974
wirketissae Chislenko, 1967
Zosime
atlantica Bodin, 1968
bergensis Drzycimski, 1968
gisleni Lang, 1948
incrassata subsp. *bathybia* Bodin, 1968
incrassata subsp. *incrassata* Sars, 1910
major Sars, 1919
mediterranea Lang, 1948
paramajor Bodin, 1968
paratypica Becker & Schriever, 1979
rubra Thompson, 1888
typica Boeck, 1873
valida Sars, 1919

Tantulocarida

Compiled by Geoff Boxshall

The classification follows Huys (1991). These microscopic crustaceans, recognised in the 1980s, occur as ectoparasites on other host crustaceans, including the copepods, isopods, tanaids and amphipods. The data are drawn largely from Huys (1991), Boxshall & Vader (1993), Huys, Andersen and Kristensen (1992), and Huys, Boxshall and Casanova (1993).

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Subclass Tantulocarida

Family Deoterthridae

- Tantulacus*
hoegi Huys, Andersen & Kristensen, 1992 A
Cumoniscus

kruppi Bonier, 1903
Boreotantulus
kunzi Huys & Boxshall, 1988
Amphitantulus
harpiniacheres Boxshall & Vader, 1993
Dicrotrichura
tricincta Huys, 1989

Family Basipodellidae

Basipodella
atlantica Boxshall & Lincoln, 1983
Stygotantulus
stocki Boxshall & Huys, 1989

Family Microdajidae

Microdajus
gaelicus Boxshall & Lincoln, 1987
langi Greve, 1965
pectinatus Boxshall, Huys & Lincoln, 1988

Family Doryphallophoridae

Doryphallophora
harrisoni (Boxshall & Lincoln, 1987)

Family Onceroxenidae

Onceroxenus
birdi Boxshall & Lincoln, 1987
curtus Boxshall & Lincoln, 1987

Cirripedia

Free-living

Compiled by A. J. Southward

Note here the parasitic groups Ascothoracida and Rhizocephala are not included, and indeed the latter are often considered to be separate from the true Cirripedia.

The taxonomic classification is based on Darwin (1851, 1854), Gruvel (1905), Pilsbry (1907, 1916), Tomlinson (1967) and Zevina (1981, 1982), as revised by Newman (1996). Other details of taxonomy and geographical limits are based on Darwin's volumes and on Bassindale (1964), Crisp *et al.* (1981), Marine Biological Association (1957), Nilsson-Cantell (1978), Newman and Ross (1976), Hayward and Ryland (1990), Relini (1980), Southward, (1976), Southward and Crisp (1963) and Young (1998a, 1998b, 1998c), with revisions from personal records of A.J. Southward and the late D.J. Crisp. Note that some geographical distributions in Nilsson-Cantell (1978) are incorrect, notably those for *Chthamalus* species and for *Semibalanus balanoides*. Species recently described, or not covered in detail or not included in the above compilations are described by Noll (1872), Southward (1995, 1999) and Turquier (1967).

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- Subclass Cirripedia**
- Superorder Acrothoracica**
- Order Pygophora**
- Suborder Pygophora**
- Family Lithoglyptidae**
- Weltneria*
- exargilla* Newman, 1974
- Kochlorine*
- hamata* Noll, 1872
- Order Apygophora**
- Suborder Apygophora**
- Family Trypetesidae**
- Trypetesa*
- lampas* Hancock, 1849
- = *Alcippe lampas*
- nasseroides* Turquier, 1967
- Superorder Thoracica**
- Order Pedunculata**
- Suborder Pedunculata**
- Family Heteralepadidae**
- Heteralepas*
- microstoma* Gruvel, 1902
- meteorensis* Carriol, 1998
- cornuta* Darwin, 1851
- Alepas*
- parasita* Rang, 1829
- Paralepas*
- minuta* Philippi, 1836
- Family Anelasmatidae**
- Anelasma*
- squalicola* Darwin, 1851
- Suborder Lepadomorpha**
- Family Oxynaspididae**
- Oxynaspis*
- celata* Darwin, 1851
- patens* Aurivillius, 1894
- Family Poecilasmatidae**
- Poecilasma*
- aurantia* Darwin, 1851
- crassa* Gray, 1848
- Glyptelasma*
- hamatum* Calman, 1919
- carinatum* Hoek, 1883
- rectum* Pilsbry, 1907
- Octolasmis*
- lowei* Darwin, 1851
- Dichelaspis*
- sessilis* Hoek, 1883
- thieli* Young, 1998
- darwini* (Philippi, 1861)
- = *Octolasmus darwini*
- Family Lepadidae**
- Lepas*
- anatifera* Linnaeus, 1758
- anserifera* Linnaeus, 1758
- hilli* Leach, 1818
- pectinata* Spengler, 1793
- Dosima*
- fascicularis* Ellis & Solander, 1786
- Conchoderma*
- virgatum* Spengler, 1789
- auritum* (Linnaeus, 1758)
- Suborder Scalpellomorpha**
- Family Calanticidae**
- Scillaelepas*
- gemma* (Aurivillius, 1894)
- Gruvelialepas*
- pilsbryi* (Gruvel, 1911)
- Aurivillialepas*
- calyculus* (Aurivillius, 1898)
- falcata* (Aurivillius, 1898)
- Smilium*
- acutum* (Hoek, 1883)
- Family Pollicipedidae**
- Pollicipes*
- pollicipes* (Gmelin, 1789)
- = *Pollicipes cornucopia*

Family Scalpellidae

Subfamily Scalpellinae

- Scalpellum*
scalpellum (Linnaeus, 1758)
Ornatoscalpellum
stroemii M. Sars, 1859
Hamatoscalpellum
hamatum G.O. Sars, 1879
Litoscalpellum
meteorica Young, 1998
Neoscalpellum
debile (Aurivillius, 1898)

Subfamily Arcoscalpellinae

- Arcoscalpellum*
michelottianum (Seguenza, 1876)
eponkos Young, 1998
tritonis (Hoek, 1883)
Planoscalpellum
limpidus Zevina, 1976
Tarasovium
cornutum (G.O. Sars, 1879)
Weltnerium
nymphocola (Hoek, 1883)
pusillum (Aurivillius, 1898)
Verum
parazelandiae Young, 1998
striolatum (G.O. Sars, 1877)
Catherinum
recurvitergum (Gruvel, 1900)
Amigdoscalpellum
hispidum (G.O. Sars, 1890)
mammilatum (Aurivillius, 1898)
rigidum (Aurivillius, 1898)
Trianguloscalpellum
regium (Wyville-Thomson, 1877)
ovale (Hoek, 1883)
darwini (Hoek, 1883)
gigas (Hoek, 1883)
Teloscalpellum
anceps (Aurivillius, 1896)
atlanticum (Gruvel, 1900)
gracile (Gruvel, 1920)
incisum (Aurivillius, 1898)
luteum (Gruvel, 1900)

Order Sessilia

Suborder Verrucomorpha

Family Verrucidae

- Altiverruca*
costata (Aurivillius, 1898)
crenata (Aurivillius, 1898)
erecta (Gruvel, 1900)
gibbosa (Hoek, 1883)
inermis (Aurivillius, 1898)
carinata (Gruvel, 1900)
obliqua (Hoek, 1883)
Newmaniverruca
ferruginea Young, 1998
Metaverruca
aequalis (Aurivillius, 1898)
recta (Aurivillius, 1898)
cornuta (Aurivillius, 1898)
sensibilis Young, 1998
Verruca
stroemia O.F. Müller, 1776
spengleri Darwin, 1854

Suborder Balanomorpha

Superfamily Pachylasmatoidea

Family Pachylasmatidae

- Pachylasma*
giganteum Philippi, 1836

Superfamily Chthamaloidea

Family Chthamalidae

Subfamily Euraphiinae

- Euraphia*
depressa (Poli, 1795)
 = *Chthamalus depressus*

Subfamily Chthamalinae

- Chthamalus*
stellatus (Poli, 1795)
montagui Southward, 1976

Superfamily Coronuloidea

Family Chelonibiidae

- Chelonibia*
caretta Spengler, 1790
testudinaria (Linnaeus, 1758)
patula (Ranzani, 1820)

Family Platylepadidae

- Platylepas*
hexastylus (Fabricius, 1798)
Stomatolepas
elegans (Costas, 1883)

Family Coronulidae

- Coronula*
diadema (Linnaeus, 1758)
Xenobalanus
globicipitis Steenstrup, 1851

Superfamily Tetracitoidea

Family Bathylasmatidae

Subfamily Bathylasmatinae

- Bathylasma*
hirsutum (Hoek, 1883)

Subfamily Hexelasmatinae

- Hexelasma*
americanum Pilsbry, 1916

Family Tetracitidae

Subfamily Tetracitinae

- Tesseropora*
atlantica Newman & Ross, 1976

Superfamily Balanoidea

Family Archaeobalanidae

Subfamily Archaeobalaninae

- Chirona*
hameri (Ascanius, 1767)
 = *Balanus hameri*
Solidobalanus
fallax (Broch, 1927)

Subfamily Acastinae

- Acasta*
spongites (Poli, 1795)
Conopea
calceola (Ellis, 1758)
 = *Balanus calceolus*

Subfamily Elminiinae

- Elminius*
modestus Darwin, 1854

Subfamily Semibalaninae

- Semibalanus*
balanoides (Linnaeus, 1758)
 = *Balanus balanoides*

Family Pyrgomatidae

Subfamily Megatrematinae

- Megatrema*
anglicum (Sowerby, 1823)
 = *Pyrgoma anglicum*

Family Balanidae

Subfamily Balaninae

- Balanus*
balanus (Linnaeus, 1758)
 = *Balanus porcatus*
crenatus Bruguière, 1789
amphitrite Darwin, 1854

= *Balanus amphitrite* subsp. *amphitrite*
eburneus Gould, 1841
improvisus Darwin, 1854
spongicola Brown, 1844
trigonus Darwin, 1854
perforatus Bruguière, 1789

Subfamily Megabalaninae

Megabalanus
tintinnabulum (Linnaeus, 1758)
 = *Balanus tintinnabulum*
azoricus (Pilsbry, 1916)
 = *Balanus tintinnabulum*
tulipiformis (Ellis, 1758)

Ascothoracida

Compiled by Geoff Boxshall

The classification follows Grygier (1987). These highly transformed thecostracan crustaceans occur as parasites of echinoderms and corals. The data for European waters are drawn largely from the unpublished PhD thesis of Grygier (Grygier, 1983a), from Grygier (1983b), from Moyse (1983) and Stone & Moyse (1985).

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Subclass Ascothoracida

Order Dendrogastrida

Family Ascothoracidae

Ascothorax
ophioctenis Djakonov, 1914
pilocaudatus Grygier, 1983

Family Dendrogastridae

Dendrogaster
astericola Knipovich, 1890
Bifurgaster
freyellae Stone & Moyse, 1985
Dendrogaster
murmanensis Wagin, 1950
Ulophysema
oeresundense Brattström, 1936

Order Laurida

Family Lauridae

Laura
gerardiae Lacaze-Duthiers, 1865

Family Petraridae

Petrarca
azorica Grygier, 1985

Family Synagogidae

Isidascus
bassindalei Moyse, 1983
Synagoga
mira Norman, 1888

Rhizocephala

Compiled by Geoff Boxshall

The classification follows Høeg & Lützen (1985) and was updated to incorporate the changes proposed by Høeg & Rybakov (1992). These highly transformed crustaceans occur as parasites on host crustaceans. The data for Northern European waters are drawn largely from the excellent account by Høeg & Lützen (1985) of the Rhizocephala of Scandinavia and for Mediterranean waters, from the classic monograph by Smith (1906) on the Fauna of the Gulf of Naples, and from Høeg & Rybakov (1992).

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Superorder Rhizocephala

Order Akentrogonida

Family Chthamophilidae

Boschmaella
balani (Bocquet-Védrine, 1967)
Chthamophilus
delagei Bocquet-Védrine, 1957

Family Clistosaccidae

Clistosaccus
paguri Lilljeborg, 1860
Sylon
hippolytes M. Sars, 1870

Family Duplorbidae

Cryptogaster
cumacei Bocquet-Védrine & Bourdon, 1984
Duplorbis
calathurae Smith, 1906

incertae sedis

Polysaccus
mediterraneus (Caroli, 1929)

Order Kentrogonida

Family Lernaediscidae

Lernaediscus
ingolfi Boschma, 1928
squamiferae Pérez, 1922
Triangulus
galatheae (Norman & Scott, 1906)
munidae Smith, 1906

Family Peltogastridae

Cyphosaccus
norvegicus Boschma, 1962
Galatheascus
striatus Boschma, 1929
Parthenopea
subterranea Kossmann, 1874
Peltogaster
curvatus Kossmann, 1874
paguri Rathke, 1842
Peltogastrella
sulcata (Lilljeborg, 1859)
Tortugaster
boschmai (Brinkman, 1939)
Trachelosaccus
hymenodora (G.O. Sars, 1879)

Family Sacculinidae

Drepanorchis
neglecta (Fraisie, 1877)
Sacculina