

## ALIEN SPECIES IN ITALIAN SEAS by the Allochthonous Species Group

The SIBM Allochthonous Species Group (ASG) was set up in 1999, following the proposal of the pro tempore President Professor Giulio Relini (University of Genoa), who over the years has assiduously followed and sustained the group's work. About 100 researchers from several Universities and Research Centers have taken part to various extents. The group has been responsible for updating the list of reported alien species introduced into Italian marine waters.

"Alien" species are considered those species found outside their native distribution range and out of their natural possible expansion range, whose presence in a given region is due to intentional or non-intentional introduction mediated by humans. Therefore, species introduced by various vectors (navigation, aquaculture, aquariology, artificial channels, etc.) fall under this definition. It includes species coming from the Red Sea through the Suez Canal (lessepsian species), whereas the Atlantic species, which have arrived autonomously through Gibraltar, are excluded. The period taken into consideration extends from the end of the second world war (1945) to 2009.

Since 2000, the SIBM Allochthonous Species Group has contributed to the compiling of a national report for Italy every year (prepared by the coordinator Professor Anna Occhipinti-Ambrogi of the University of Pavia), which has been presented at the annual meetings of the ICES (International Commission for the Exploration of the Sea) Working Group on Introductions and Transfer of Marine Organisms (WGITMO) (<http://www.ices.dk/workinggroups/ViewWorkingGroup.aspx?ID=33>).

A sub-group of specialists of various taxa carried out a careful revision of the list of alien species included in the national reports.

The taxa considered so far are: Macrophyta, Porifera, Ctenophora, Cnidaria (Hydrozoa, Scyphozoa, Anthozoa), Annelida Polychaeta, Mollusca (Bivalvia, Gastropoda, Cephalopoda), Crustacea (Copepoda, Peracarida, Decapoda), Pcnogonida, Bryozoa, Tunicata, Vertebrata (Chondrichthyes, Osteichthyes).

The researchers who contributed information to the National Reports are:

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Researchers indicated with an asterisk have contributed to the critical revision of data and to compile the list presented below, which is updated to 2009. Further elaboration and comments are available in the paper by Occhipinti-Ambrogi A. *et alii*, [Alien species along the Italian coast: an overview](#). *Biological Invasions*, in press.

### List of alien species in the Italian seas

#### Macrophyta

1. *Acrothamnion preissii* (Sonder) E.M. Wollaston
2. *Agardhiella subulata* (C. Agardh) Kraft & M.J. Wynne
3. *Aglaothamnion feldmanniae* Halos
4. *Antithamnion amphigeneum* A. Millar
5. *Antithamnion hubbsii* E.Y. Dawson
6. *Apoglossum gregarium* (E.Y. Dawson) M.J. Wynne
7. *Asparagopsis armata* Harvey
8. *Bonnemaisonia hamifera* Hariot
9. *Botryocladia madagascariensis* Feldmann-Mazoyer

10. *Caulerpa racemosa* (Forsskål) J. Agardh var. *cylindracea* (Sonder) Verlaque, Huisman & Boudouresque
  11. *Caulerpa taxifolia* (Vahl) C. Agardh
  12. *Ceramium strobiliforme* G.W. Lawson & D.M. John
  13. *Chondria polyrhiza* Collins & Hervey
  14. *Chondria pygmaea* Garbary & Vandermeulen
  15. *Codium fragile* (Suringar) Hariot ssp. *fragile*
  16. *Grateloupia turuturu* Yamada
  17. *Halophila stipulacea* (Forsskål) Ascherson
  18. *Hypnea cornuta* (Kützting) J. Agardh
  19. *Hypnea spinella* (C. Agardh) Kützting
  20. *Hypnea valentiae* (Turner) Montagne
  21. *Laurencia majuscula* (Harvey) A.H.S. Lucas
  22. *Leathesia marina* (Lyngbye) Decaisne
  23. *Lomentaria hakodatensis* Yendo
  24. *Lophocladia lallemandii* (Montagne) F. Schmitz
  25. *Neosiphonia harveyi* (J.W. Bailey) M.S. Kim, H.G. Choi, Guiry & G.W. Saunders
  26. *Padina boergesenii* Allender & Kraft
  27. *Plocamium secundatum* (Kützting) Kützting
  28. *Polysiphonia morrowii* Harvey
  29. *Sargassum muticum* (Yendo) Fensholt
  30. *Scytosiphon dotyi* M.J. Wynne
  31. *Symphyocladia marchantioides* (Harvey) Falkenberg
  32. *Undaria pinnatifida* (Harvey) Suringar
  33. *Womersleyella setacea* (Hollenberg) R.E. Norris
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#### Porifera

1. *Paraleucilla magna* Klatau *et al.*, 2004
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#### Ctenophora

1. *Beroe ovata* sensu Mayer, 1912
  2. *Mnemiopsis leidyi* A. Agassiz, 1865
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#### Hydrozoa

1. *Amphogona pusilla* Hartlaub, 1909
  2. *Clytia hummelincki* (Leloup, 1935)
  3. *Clytia linearis* (Thornely, 1900)
  4. *Clytia mccrady* (Brooks, 1888)
  5. *Cirrholovenia tetranema* Kramp, 1959
  6. *Cordylophora caspia* (Pallas, 1771)
  7. *Eudendrium carneum* Clarke, 1882
  8. *Eudendrium merulum* Watson, 1985
  9. *Garveia franciscana* (Torrey, 1902)
  10. *Gonionemus vertens* A. Agassiz, 1862
  11. *Moerisia inkermanica* Paltschikowa-Ostroumova, 1925
  12. *Scolionema suvaense* (A. Agassiz & Mayer, 1899)
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#### Scyphozoa

1. *Phyllorhiza punctata* von Lendenfeld, 1884
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#### Anthozoa

1. *Diadumene cincta* Stephenson, 1925
  2. *Oculina patagonica* De Angelis, 1908
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#### Polychaeta

1. *Amphicorina pectinata* (Banse, 1957)
2. *Branchiomma luctuosum* (Grube, 1869)
3. *Desdemonia ornata* Banse, 1957
4. *Epidiopatra hupferiana hupferiana* Augener, 1918
5. *Epidiopatra hupferiana monroi* Day, 1957
6. *Fabriciella qhardaqa* Banse, 1959
7. *Hyboscolex longiseta* (Schmarda, 1861)
8. *Isolda pulchella* Müller, 1858
9. *Leiochrides australis* Augener, 1914
10. *Linopherus canariensis* Langerhans, 1881
11. *Loimia medusa* Savigny, 1818
12. *Longibranchium atlanticum* (Day, 1973)
13. *Lumbrinerides acutiformis* (Gallardo, 1967)

14. *Lumbrinerides neogesae* Miura, 1980
  15. *Lysidice collaris* Grube, 1870
  16. *Mediomastus capensis* Day, 1961
  17. *Megalomma claparedei* Gravier, 1908
  18. *Neanthes agulhana* Day, 1963
  19. *Neopseudocapitella brasiliensis* Rullier & Amoureux, 1979
  20. *Notomastus aberans* Day, 1963
  21. *Notopygos crinita* Grube, 1855
  22. *Novafabricia infratorquata* (Fithzugh, 1983)
  23. *Ophryotrocha diadema* Åkesson, 1976
  24. *Ophryotrocha japonica nomen nudum*
  25. *Pileolaria berkeleyana* (Rioja, 1942)
  26. *Pista unibranchia* Day, 1963
  27. *Platynereis australis* (Schmarda, 1861)
  28. *Polydora colonia* Moore, 1907
  29. *Prionospio pygmaea* Hartman, 1955
  30. *Protodorvillea egena* (Ehlers, 1913)
  31. *Spirorbis marioni* Caullery & Mesnil, 1897
  32. *Streblosoma comatus* (Grube, 1856)
  33. *Syllis hyllebergi* Licher, 1999
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#### Gastropoda

1. *Aeolidiella indica* (Bergh, 1888)
  2. *Aplysia dactylomela* Rang, 1828
  3. *Aplysia parvula* Guilding in Mørch, 1863
  4. *Bursatella leachii* De Blainville, 1817
  5. *Cerithium scabridum* Philippi, 1848
  6. *Chromodoris quadricolor* (Rueppell & Leuckart, 1828)
  7. *Crepidula fornicata* (L., 1758)
  8. *Cuthona perca* (Marcus, 1958)
  9. *Erosaria turdus* (Lamarck, 1810)
  10. *Haminoea callidegenita* Gibson & Chia, 1989
  11. *Haminoea cyanomarginata* Heller & Thompson T., 1983
  12. *Melibe viridis* (Kelaart, 1858)
  13. *Polycera hedgpethi* Marcus Er., 1964
  14. *Polycerella emertoni* Verrill, 1881
  15. *Rapana venosa* (Valenciennes, 1846)
  16. *Syphonota geographica* (Adams & Reeve, 1850)
  17. *Thais lacera* (Born, 1778)
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#### Bivalvia

1. *Anadara inaequalis* (Bruguère, 1789)
  2. *Anadara transversa* (Say, 1822)
  3. *Brachidontes pharaonis* (Fisher, 1870)
  4. *Crassostrea gigas* (Thunberg, 1793)
  5. *Fulvia fragilis* (Forskål in Niebuhr, 1775)
  6. *Mercenaria mercenaria* L., 1758
  7. *Musculista senhousia* (Benson in Cantor, 1842)
  8. *Mya arenaria* L., 1758
  9. *Pinctada radiata* (Leach, 1814)
  10. *Saccostrea commercialis* (Iredale & Roughley, 1933)
  11. *Ruditapes philippinarum* (Adams & Reeve, 1850)
  12. *Theora lubrica* Gould, 1861
  13. *Xenostrobus securis* (Lamarck, 1819)
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#### Cephalopoda

1. *Tremoctopus gracilis* (Eydoux/Souleyet, 1852)
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#### Copepoda

1. *Acartia grani* Sars, 1904
  2. *Acartia tonsa* Dana, 1849
  3. *Metacalanus acutioperculum* Ohtsuka, 1984
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#### Peracarida

1. *Caprella scaura* Templeton, 1936
2. *Elasmopus pecteniscrus* (Bate, 1862)

3. *Paracerceis sculpta* (Holmes, 1904)
  4. *Paradella diana* (Menzies, 1962)
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#### Decapoda

1. *Actumnus globulus* Heller, 1861
  2. *Calappa pelii* Herklots, 1851
  3. *Callinectes danae* Smith, 1869
  4. *Callinectes sapidus* Rathbun, 1896
  5. *Charybdis lucifera* (Fabricius 1798)
  6. *Dromia spinirostris* (Miers, 1881)
  7. *Dyspanopeus sayi* (Smith, 1869)
  8. *Eriocheir sinensis* H. Milne Edwards, 1853
  9. *Herbstia nitida* Manning & Holthuis, 1981
  10. *Heteropanope laevis* (Dana, 1852)
  11. *Marsupenaeus japonicus* (Bate, 1888)
  12. *Menaethius monoceros* (Latreille, 1825)
  13. *Paralithoides camtschaticus* (Tilesius, 1815)
  14. *Percnon gibbesi* (H. Milne Edwards, 1853)
  15. *Portunus pelagicus* (L., 1758)
  16. *Rhithropanopeus harrisi* (Gould, 1841)
  17. *Scyllarus caparti* Holthuis, 1952
  18. *Thalamita gloriensis* Crosnier, 1962
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#### Picnognonida

1. *Ammothea hilgendorfi* (Böhm, 1879)
  2. *Anoplodactylus californicus* (Hall, 1912)
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#### Bryozoa

1. *Arachnoidea protecta* (Harmer, 1915)
  2. *Celleporella carolinensis* (Ryland, 1979)
  3. *Crepidacantha poissonii* (Audouin, 1826)
  4. *Electra tenella* (Hincks, 1880)
  5. *Pherusella brevituba* Soule, 1951
  6. *Tricellaria inopinata* d'Hondt & Occhipinti Ambrogi, 1985
  7. *Bugula serrata* (Lamarck, 1816)
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#### Tunicata

1. *Botrylloides violaceus* Oka, 1927
  2. *Distaplia bermudensis* Van Name, 1902
  3. *Microcosmus squamiger* (reported as *M. exasperatus* by Monniot, 1981) Hartmeyer & Michaelsen, 1928
  4. *Polyandrocarpa zorritensis* (Van Name, 1931)
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#### Osteichthyes

1. *Abudefduf vaigiensis* (Quoy & Gaimard, 1825)
  2. *Elates ransonnettii* (Steindachner, 1876)
  3. *Epinephelus coioides* (Hamilton, 1822)
  4. *Etrumeus teres* (Dekay, 1842)
  5. *Fistularia commersonii* Rüppel, 1838
  6. *Pinguipes brasilianus* Cuvier & Valenciennes, 1829
  7. *Pomadasys stridens* (Forsskål, 1875)
  8. *Siganus luridus* (Rüppel, 1829)
  9. *Stephanolepis diaspros* Fraser-Brunner, 1940
  10. *Synagrops japonicus* (Doderlein, 1883)
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ASG-SIBM 2010. Alien Species in Italian Seas. [www.sibm.it](http://www.sibm.it)