

List of non-native species in the marine subregions: **Western Mediterranean Sea**

What is the Marine Srategy Framework Directive (MSFD)?

Adopted on 2008, the Marine Directive aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource upon wich marine-related economic and social activities depnd.

To ensure the Good Environmental Status (GES), the establishment of a monitoring programme is required. And BioLit aims to contribute to the monitoring programme for the identified non-indenous species.

Please, find the other non-native species ...

BioLit targets some « new immigrant species » (non-indigenous species) more accessible to a large public. But BioLit programme also focus on a wider range of the following non-native species that can be registered on www.biolit.fr website (« New immigrants action »)!



DIVERS PROTOZOAIRES

Bonamia ostreae Marteilia refringens Perkinsus olseni

Photobacterium damselae

FORAMINIFERA

Cymbaloporetta plana Planogypsina acervalis Schackoinella imperatoria Sorites orbiculus

OCHROPHYTA

Acrothrix gracilis Botryella cf. parva Chorda filum

Chrysonephos lewisii Cladosiphon zosterae Colpomenia peregrina Desmarestia viridis Dictyota okamurae

Fucus spiralis

Halothrix lumbricalis Laminaria japonica Leathesia difformis Leathesia marina

Microspongium tenuissimum

Padina antillarum Padina boergesenii Padina boryana

Punctaria tenuissima

Pylaiella littoralis
Saccharina japonica
Sargassum muticum
Scytosiphon dotyi
Spatoglossum variabile
Sphaerotrichia firma
Undaria pinnatifida



CHLOROPHYTA

Caulerpa racemosa var. cylindracea

Caulerpa taxifolia

Cladophora hutchinsioides

Codium fragile subsp. fragile

Codium fragile subsp. tomentosoides

Derbesia boergesenii

Derbesia rhizophora

Ulva fasciata

Ulva ohnoi

Ulva pertusa

Ulvaria obscura

RHODOPHYTA

Acanthophora nayadiformis

Acrochaetium robustum

Acrochaetium spathoglossi

Acrochaetium subseriatum

Acrothamnion preissii

Agardhiella subulata

Aglaothamnion feldmanniae

Ahnfeltiopsis flabelliformis

Anotrichium okamurae

Antithamnion amphigeneum

Antithamnion hubbsii

Antithamnionella boergesenii

Antithamnionella elegans

Antithamnionella spirographidis

Antithamnionella sublittoralis

Antithamnionella ternifolia



Apoglossum gregarium

Asparagopsis armata

Asparagopsis taxiformis

Bonnemaisonia hamifera

Botryocladia madagascariensis

Caulacanthus okamurae

Ceramium bisporum

Chondria coerulescens

Chondria curvilineata

Chondria pygmaea

Chondrus giganteus f. flabellatus

Chrysymenia wrightii

Dasya sessilis

Dasysiphonia sp.

Galaxaura rugosa

Ganonema farinosum

Goniotrichopsis sublittoralis

Grateloupia asiatica

Grateloupia lanceolata

Grateloupia luxurians

Grateloupia minima

Grateloupia patens

Grateloupia subpectinata

Grateloupia turuturu

Griffithsia corallinoides

Herposiphonia parca

Hypnea cornuta

Hypnea spinella

Hypnea valentiae



Laurencia caduciramulosa
Laurencia okamurae
Lithophyllum yessoense
Lomentaria flaccida
Lomentaria hakodatensis
Lophocladia lallemandii
Nemalion vermiculare
Neosiphonia harveyi
Nitophyllum stellato-corticatum
Osmundea oederi
Pleonosporium caribaeum
Plocamium secundatum

Polysiphonia atlantica
Polysiphonia fucoides
Polysiphonia morrowii
Polysiphonia paniculata
Polysiphonia stricta
Porphyra yezoensis
Pterosiphonia tanakae
Rhodophysema georgei
Rhodothamniella codicola
Sarconema filiforme
Solieria filiformis
Spongoclonium caribaeum
Symphyocladia marchantioides
Womersleyella setacea



MAGNOLIOPHYTA

Halophila stipulacea

BRYOZOA

Watersipora subtorquata Arachnoidea protecta Bowerbankia gracillima

Bugula fulva Bugula serrata

Pherusella brevituba

CTENOHORA

Mnemiopsis leidyi*

CNIDARIA

Anthozoa Haliplanella lineata

Oculina patagonica

Hydrozoa Amphogona pusilla*

Arctapodema australis*

Campalecium medusiferum* Cirrholovenia tetranema*

Clytia hummelincki*

Clytia linearis Clytia mccradyi*

Cordylophora caspia

Coryne eximia* Eirene viridula*

Eucheilota paradoxica Eudendrium carneum Eudendrium merulum Filellum serratum* Garveia franciscana



Gonionemus vertens Moerisia inkermanica* Octotiara russelli* Russellia mirabilis Scolionema suvaensis* Sertularia marginata est Phyllorhiza punctata* Stomolophus meleagris*

Scyphozoa



PORIFERA

Paraleucilla magna

NEMATODA

Anguillicola novaezelandiae

Anguillicola crassus

PLATYHELMINTHES

Allolepidapedon fistulariae

ARTHROPODA

Acartia (Acanthacartia) tonsa

Actumnus globulus

Amphibalanus eburneus**

Anoplodactylus californicus

Austrominius modestus**

Automate branchialis

Balanus onodyates

Balanus reticulatus

Balanus trigonus

Bemlos leptocheirus

Calanopia elliptica

Calappa pelii

Callinectes sapidus

Cancer pagurus

Caprella scaura

Charybdis feriata

Cryptosoma cristatum

Dasya sessilis

Elasmopus pectenicrus

Elminius modestus

Eocuma sarsii

Eriocheir sinensis



Erythrosquilla sp. Glabropilumnus laevis** Hemigrapsus sanguineus Heteropanope laevis Labidocera detruncata Leptochelia dubia Marsupenaeus japonicus Megabalanus tintinnabulum Menaethius monoceros Mesanthura spp. Metacalanus acutioperculum Monocorophium sextonae Myicola ostreae Mytilicola orientalis Necora puber Paracalanus indicus Paracartia grani Paracerceis sculpta Paradella dianae Parvocalanus crassirostris** Percnon gibbesi Pilumnopeus vauquelini Plagusia squamosa Portunus pelagicus Portunus segnis**



Processa macrodactyla

Pseudocalanus elongatus

Rhithropanopeus harrisii

Scaphocalanus amplius

Scolecithrix valens

Scyllarus posteli

Sinalpheus hululensis Coutière

Sphaeroma venustissimum

Sphaeroma walkeri

Stenothoe gallensis

Subeucalanus subcrassus**

Synalpheus tumidomanus africanus**

Thalamita gloriensis

Triconia rufa

Triconia umerus

Unciolella lunata



ANNELIDA

Amphicorina pectinata

Apoprionospio pygmaea

Branchiomma boholensis

Branchiomma luctuosum

Desdemona ornata

Dispio uncinata

Erinaceusyllis serratosetosa

Eunice antennata

Eunice cf. cariboea

Eurythoe complanata

Fabriciola ghardaga Banse

Ficopomatus enigmaticus

Haploscoloplos kerguelensis

Hesionura serrata

Hyboscolex longiseta

Hydroides albiceps

Hydroides dianthus

Hydroides dirampha

Hydroides elegans

Hydroides heterocerus

Hydroides homocerus

Hydroides steinitzi

Leiochrides australis

Leocrates chinensis

Longibranchium atlanticum

Lumbrineris acutifrons

Lumbrineris neogesae

Lumbrineris perkinsi

Lysidice collaris



Mediomastus capensis

Metasychis gotoi

Neanthes agulhana

Neopseudocapitella brasiliensis

Nereis jacksoni

Notomastus aberans

Notomastus mossambicus

Novafabricia infratorquata

Oenone cf. fulgida

Ophryotrocha diadema

Ophryotrocha japonica

Paraprionospio coora

Pileolaria berkeleyana

Pista unibranchia

Podarkeopsis capensis

Polydora colonia

Polydora cornuta

Sigambra parva

Spirorbis marioni

Streblosoma comatus**

Syllis pectinans

Syllis schulzi

Terebella ehrenbergi



ECHINODERMATA

Acanthaster planci
Ophiactis savignyi
Protoreaster nodosus

MOLLUSCA

Aeolidiella indica

Alvania dorbignyi

Anadara inaquivalvis

Anadara kagoshimensis**

Anadara transversa**

Anteaeolidiella foulisi**

Bostrycapulus odites**

Brachydontes pharaonis

Bursatella leachi

Callista florida

Cerithium scabridum

Chlamys lischkei

Chromodoris quadricolor

Crassostrea angulata

Crassostrea gigas

Crepidula aculeata

Crepidula fornicata

Discodoris lilacina

Favorinus ghanensis

Fulvia fragilis

Gibbula albida

Godiva quadricolor

Melibe fimbriata

Melibe viridis**

Mercenaria mercenaria



Mitrella psilla
Modiolus auriculatus
Musculista perfragilis
Musculista senhousia
Mya arenaria
Paphia textile
Papyridea australe

Papyridea papyracea Petricola pholadiformis Pinctada margaritifera Pinctada radiata Pleurobranchus forskalii Polycera hedgpethi Polycerella emertoni Psammotreta praerupta Pseudochama corbieri Quoyula madreporarum Rapana venosa Rissoina spirata Rissoina spirata Ruditapes philippinarum Sabia conica Saccostrea cucullata Scapharca inaequivalvis Thais lacera Theora lubrica Tremoctopus gracilis Xenostrobus securis



SIPUNCULA

Apionsoma (Apionsoma) misakianum Phascolion (Isomya) convestitum

CHORDATA

Microcoemus exasperatus

Leiognathus klunzingeri

Actinopterygii Abudefduf vaigiensis

Acanthurus monroviae Aluterus monocerus Anarhichas lupus Beryx splendens

Bregmaceros atlanticus Centrolabrus exoletus

Chaunax suttkusi

Chilomycterus reticulatus

Diodon hystrix Diplodus bellottii

Fistularia commersonii

Fistularia petimba

Gephyroberyx darwini Glaucostegus halavi

Gymnammodytes semisquamatus

Halosaurus ovenii Hippocampus fuscus Kyphosus incisor

Kyphosus sectator

Lutjanus jocu Makaira indica

Microchirus boscanion

Microchirus (Zevaia) hexophthalmus



Pagellus bellottii

Papilloculiceps longiceps

Pinguipes brasilianus

Pisodonophis semicinctus

Plotosus lineatus

Pomadasys stridens

Psenes pellucidus

Pseudupeneus prayensis

Rachycentron canadum

Scorpaena stephanica

Seriola carpenteri

Seriola fasciata

Siganus Iuridus

Solea senegalensis

Sphoeroides marmoratus

Sphoeroides pachygaster

Sphyraena chrysotaenia

Spratelloides delicatulus

Stephanolepis diaspros

Synagrops japonicus

Synaptura Iusitanica

Syngnathus rostellatus

Trachyscorpia cristulata echinata

Zenopsis conchifera

Ascidiacea Cystodytes philippinensis

Distaplia bermudensis

Ecteinascidia styeloides

Microcosmus squamiger

Perophora multiclathtrata

Polyandrocarpa zorritensis



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Rhodosoma turcicum

Styela clava

Elasmobranchii

Trididemnum cf. savignii

Carcharhinus altimus

Carcharhinus falciformis

Galeocerdo cuvier

Isurus paucus

Rhizoprionodon acutus

Sphyrna mokarran