**Additional file 1. Search terms used to find relevant studies**

We searched for relevant studies in Web of Science online database using a complex set of search terms:

(alga* OR macroalga* OR seaweed*) AND (alien*OR invasi*OR introduced OR allochthonous OR nonindigenous OR non-indigenous OR “non native*” OR non-native*OR exotic*) AND (marine OR brackish OR estuar*OR coastal OR shallow OR sea*OR aquatic OR maritime OR lagoon* OR pelagic OR benth* OR demersal OR shore* OR intertidal OR subtidal OR ocean* OR bay OR cove) AND (impact* OR effect* OR influence OR consequence* OR food-web* OR “food web*” OR ecosystem* OR biomass OR biodiversity OR “biological diversity” OR communit* OR richness OR diversity OR abundance OR evenness OR cover OR density OR “reproductive capacity” OR mortality OR growth OR assemblage* OR producti* OR decomposition OR “nutrient cycl*” OR oxygen OR carbon OR flux OR respiration OR “ecosystem matabolism” OR “sediment stabilisation” OR epiphyte* OR “sediment mixing” OR resilience OR stability OR resistance OR invasibility)

**Additional file 3. List of the 26 papers excluded after reading of the full text and reasons for exclusion**

| Reference | Reason for exclusion |
|---|---|
| Antolic et al. 2008 - Nova Hedwigia 86: 155-167 | no replication |
| Antoniadou & Chiniroglou 2007 - Journal of the Marine Biological Association of the United Kingdom 87: 629-641 | The non-native species was present at all sites (lack of proper controls) |
| Argyrou et al. 1999 - Oceanologica Acta 22: 517-528 | sampling has been done only 1 time before and 1 time after at the same sites (lack of controls); in addition, the 10 grab samples have been pooled (not averaged) so that there is no mean; sites were in proximity of sewage outfalls and fish farming |
| Arigoni et al. 2002 - Journal of Fish Biology 60: 1486-1497 | variations in number of green or brown individuals cannot be interpreted as positive or negative effects by the invasive species |
| Bellan-Santini et al. 1996 - Journal of the Marine Biological Association of the United Kingdom 76: 235-237 | no replication |
| Box et al. 2010 - Botanica Marina 53: 367-375 | no replication |
| Burfeind et al. 2009 - Environmental Biology of Fishes 84: 317-322 | preferences for different habitats cannot be interpreted as positive or negative effects by the invasive species |
| Cabanellas-Reboredo et al. 2010 - Scientia Marina 74: 101-110 | the invaded and reference sites are on different islands (Mallorca *vs* Ibiza). The design is totally confounded |
| Casu et al. 2009 - Aquatic Ecology 43 : 1023-1029 | variations in isotopes cannot be interpreted as positive or negative effects by the invasive species |
| Ceccherelli & Cinelli 1997 - Journal of Experimental Biology and Ecology 217: 165-177 | data were not used as they are the same reported in the (included) study by Ceccherelli and Sechi 2002 |
| Engelen 2011 - Hydrobiologia 669: 157-165 | response variables cannot be interpreted as positive or negative effects of invasive species on grazers |
| Farrel & Fletcher 2004 - Journal of Experimental Marine Biology and Ecology 334: 236-243 | the effects of removing *Undaria* or the native kelp species could not be disentangled |
| Katsanevakis and Thessalou-Legaki 2009 - Aquatic Biology 8: 45-54 | at some sites, only 1 transect was sampled, while at others (where *P. nobilis* was more abundant) |

| | |
|---|---|
| | more than 1 transect was sampled; depth differed among transects; length of the transects differ |
| Klein & Verlaque 2009 - Hydrobiologia 636: 369-378 | the non-invaded sites is heavily colonized by *Womersleyella*: basically this is a comparison between *C. racemosa* invaded and *Womerslyella* invaded sites |
| Longepierre et al. 2005 - Biodiversity and Conservation 14: 365-376 | unknown number of temporal samplings and number of replicates for sites with or without the invasive species |
| Lorenti et al. 2011 Marine Ecology-an Evolutionary Perspective 32: 320-334 | only one sampling time before and 2 times (very close) after 24 years |
| Montefalcone et al. 2007 Estuarine Coastal and Shelf Science 75: 63-71 | at each meadow (distant 10s of Km) there was only 1 transect at each of 3 depths; values of CI and SI are averages over the three depths for each meadow |
| Oakes et al. 2011 - Limnology and Oceanography 56: 1824-1831 | variations in isotopes cannot be interpreted as positive or negative effects by the invasive species |
| Pedersen et al. 2005 Aquatic Botany 83: 31-47 | no useful data (biomass/cover/growth of the invasive *vs* those of another alga) |
| Peirano et al. 2005 Marine Pollution Bulletin 50: 817-822 | at each meadow (distant 10s of Km) there was only 1 transect (no replication) |
| Piazzi & Cinelli 2001 Botanica Marina 44: 509-520 | no reference site |
| Relini et al. 1998 - Biologia Marina Mediterranea 5: 185-195 | no replication |
| Sanchez & Fernandez 2006 - Marine Ecology Progress Series 313: 85-94 | no data on the effects of *Sargassum* on other species |
| Verlaque & Fritayre 1994 - Oceanologica Acta 17: 659-672 | unknown number of replicates |
| Viejo 1999 - Aquatic Botany 64: 131-149 | *Sargassum* is in pools, while *Fucus* is not. The comparison between *Sargassum* and *Cystoseira* (1 invader versus 1 native) is not useful |
| Zuljevic 2011 - Biological Invasions 13: 2303-2308 | no controls |

**Additional file 4. List of the papers reviewed.**

1. Ambrose RF, Nelson BV (1982) Inhibition of giant kelp recruitment by an introduced brown alga. Botanica Marina 25: 265-267

2. Balata D, Piazzi L, Cinelli F (2004) A comparison among assemblages in areas invaded by *Caulerpa taxifolia* and *C. racemosa* on a subtidal Mediterranean rocky bottom. Marine Ecology-Pubblicazioni Della Stazione Zoologica Di Napoli I 25: 1-13

3. Baldacconi R, Corriero G (2009) Effects of the spread of the alga *Caulerpa racemosa* var. *cylindracea* on the sponge assemblage from coralligenous concretions of the Apulian coast (Ionian Sea, Italy). Marine Ecology-an Evolutionary Perspective 30: 337-345

4. Ballesteros E, Cebrian E, Alcoverro T (2007) Mortality of shoots of *Posidonia oceanica* following meadow invasion by the red alga *Lophociadia lallemandii*. Botanica Marina 50: 8-13

5. Bartoli P, Boudouresque CF (1997) Transmission failure of parasites (Digenea) in sites colonized by the recently introduced invasive alga *Caulerpa taxifolia*. Marine Ecology-Progress Series 154: 253-260

6. Boudouresque CF, Lemée R, Mari X, Meinesz A (1996) The invasive alga *Caulerpa taxifolia* is not a suitable diet for the sea urchin *Paracentrotus lividus*. Aquatic Botany 53: 245-250

7. Box A, Sureda A, Deudero S (2008) Antioxidant response of the bivalve *Pinna nobilis* colonised by invasive red macroalgae *Lophocladia lallemandii*. Comparative Biochemistry and Physiology C-Toxicology & Pharmacology 149: 456-460

8. Box A, Sureda A, Deudero S, Blanco A, Terrados J, Grau AM, Riera F (2009) Diet and physiological responses of *Spondyliosoma cantharus* (Linnaeus, 1758) to the *Caulerpa racemosa* var. *cylindracea* invasion. Journal of Experimental Marine Biology and Ecology 380: 11-19

9. Britton-Simmons KH (2004) Direct and indirect effects of the introduced alga *Sargassum muticum* on benthic, subtidal communities of Washington State, USA. Marine Ecology-Progress Series 277: 61-78

10. Britton-Simmons KH, Pister B, Sanchez I, Okamoto D (2011) Response of a native, herbivorous snail to the introduced seaweed *Sargassum muticum*. Hydrobiologia 661: 187-196

11. Bulleri F, Airoldi L, Branca GM, Abbiati M (2006) Positive effects of the introduced green alga, *Codium fragile* ssp. *tomentosoides*, on recruitment and survival of mussels. Marine Biology 148: 1213-1220

12. Bulleri F, Balata D, Bertocci I, Tamburello L, Benedetti-Cecchi L (2010) The seaweed *Caulerpa racemosa* on Mediterranean rocky reefs: from passenger to driver of ecological change. Ecology 91: 2205-2212

13. Buschbaum C, Chapman AS, Saier B (2006) How an introduced seaweed can affect epibiota diversity in different coastal systems. Marine Biology 148: 743-754

14. Byers JE, Wright JT, Gribben PE (2010) Variable direct and indirect effects of a habitat-modifying invasive species on m*OR*tality of native fauna. Ecology 91: 1787-1798

15. Cacabelos E, Olabarria C, Incera M, Troncoso JS (2010) Effects of habitat structure and tidal height on epifaunal assemblages associated with macroalgae. Estuarine Coastal and Shelf Science 89: 43-52

16. Carroll JM, Peterson BJ, Bonal D, Weinstock A, Smith CF, Tettelbach ST (2010) Comparative survival of bay scallops in eelgrass and the introduced alga, *Codium fragile*, in a New York estuary. Marine Biology 157: 249-259

17. Casas G, Scrosati R, Piriz ML (2004) The invasive kelp *Undaria pinnatifida* (Phaeophyceae, Laminariales) reduces native seaweed diversity in Nuevo Gulf (Patagonia, Argentina). Biological Invasions 6: 411-416

18. Ceccherelli G, Campo D (2002) Different effects of *Caulerpa racemosa* on two co-occurring seagrasses in the Mediterranean. Botanica Marina 45: 71-76

19. Ceccherelli G, Sechi N (2002) Nutrient availability in the sediment and the reciprocal effects between the native seagrass *Cymodocea nodosa* and the introduced rhizophytic alga *Caulerpa taxifolia*. Hydrobiologia 474: 57-66

20. Chavanich S, Harris LG (2004) Impact of the non-native macroalga *Codium fragile* (Sur.) Hariot ssp *tomentosoides* (van Goor) Silva on the native snail *Lacuna vincta* (Montagu, 1803) in the Gulf of Maine. Veliger 47: 85-90

21. Chrisholm JRM, Moulin P (2003) Stimulation of nitrogen fixation in refractory organic sediments by *Caulerpa taxifolia* (Chlorophyta). Limnology and Oceanography 48: 787-794

22. Curiel D, Guidetti P, Bellemo G, Scattolin M, Marzocchi M (2002) The introduced alga *Undaria pinnatifida* (Laminariales, Alariaceae) in the lagoon of Venice. Hydrobiologia 477: 209-219

23. Deudero S, Blanco A, Box A, Mateu-Vicens G, Cabanellas-Reboredo M, Sureda A (2010) Interaction between the invasive macroalga *Lophocladia lallemandii* and the bryozoan *Reteporella grimaldii* at seagrass meadows: density and physiological responses. Biological Invasions 12: 41-52

24. Deudero S, Box A, Alos J, Arroyo NL, Marba N (2011) Functional changes due to invasive species: Food web shifts at shallow *Posidonia oceanica* seagrass beds colonized by the alien macroalga *Caulerpa racemosa*. Estuarine Coastal and Shelf Science 93: 106-116

25. Devillele X, Verlaque M (1995) Changes and degradation in a Posidonia oceanica bed invaded by the introduced tropical alga *Caulerpa taxifolia* in the North-Western Mediterranean. Botanica Marina 38: 79-87

26. Drouin A, McKindsey CW, Johnson LE (2011) Higher abundance and diversity in faunal assemblages with the invasion of *Codium fragile* ssp *fragile* in eelgrass meadows. Marine Ecology-Progress Series 424: 105-117

27. Drouin A, McKindsey CW, Johnson LE (2012) Detecting the impacts of notorious invaders: experiments versus observations in the invasion of eelgrass meadows by the green seaweed *Codium fragile*. Oecologia 168: 491-502

28. Dumay O, Fernandez C, Pergent G (2002) Primary production and vegetative cycle in *Posidonia oceanica* when in competition with the green algae *Caulerpa taxifolia* and *Caulerpa racemosa*. Journal of the Marine Biological Association of the United Kingdom 82: 379-387

29. Dumay O, Costa J, Desjobert JM, Pergent G (2004) Variations in the concentration of phenolic compounds in the seagrass *Posidonia oceanica* under conditions of competition. Phytochemistry 65: 3211-3220

30. Eyre BD, Maher D, Oakes JM, Erler DV, Glasby TM (2011) Differences in benthic metabolism, nutrient fluxes, and denitrification in *Caulerpa taxifolia* communities compared to uninvaded bare sediment and seagrass (*Zostera capricorni*) habitats. Limnology and Oceanography 56: 1737-1750

31. Ferrer E, Garreta AG, Ribera MA (1997) Effect of *Caulerpa taxifolia* on the productivity of two Mediterranean macrophytes. Marine Ecology-Progress Series 149: 279-287

32. Francour P, Harmelin-Vivien M, Harmelin JG, Duclerc J (1995) Impact of *Caulerpa taxifolia* colonization on the ichthyofauna of North-Western Mediterranean Sea – Preliminary results. Hydrobiologia 300: 345-353

33. Francour P, Pellissier V, Mangialajo L, Buisson E, Stadelmann B, Veillard N, Meinesz A, Thibaut T, De Vaugelas J (2009) Changes in invertebrate assemblages of *Posidonia oceanica* beds following *Caulerpa taxifolia* invasion. Vie et Milieu – Life and Environment 59: 31-38

34. Gallucci F, Hutchings P, Gribben P, Fonseca G (2012) Habitat alteration and community-level effects of an invasive ecosystem engineer: a case study along the coast of NSW, Australia. Marine Ecology-Progress Series 449: 95-108

35. Gennaro P, Piazzi L (2011) Synergism between two anthropic impacts: *Caulerpa racemosa* var. *cylindracea* invasion and seawater nutrient enrichment. Marine Ecology-Progress Series 427: 59-70

36. Gestoso I, Olabarria C, Troncoso JS (2010) Variability of epifaunal assemblages associated with native and invasive macroalgae. Marine and Freshwater Research 61: 724-731

37. Gollan JR, Wright JT (2006) Limited grazing pressure by native herbivores on the invasive seaweed *Caulerpa taxifolia* in a temperate Australian estuary. Marine and Freshwater Research 57: 685-694

38. Gribben PE, Wright JT (2006) Invasive seaweed enhances recruitment of a native bivalve: roles of refuge from predation and the habitat choice of recruits. Marine Ecology-Progress Series 318: 177-185

39. Gribben PE, Wright JT (2006) Sublethal effects on reproduction in native fauna: are females more vulnerable to biological invasion? Oecologia 149: 352-361

40. Gribben PE, Wright JT, O'Connor WA, Doblin MA, Eyre B, Steinberg PD (2009) Reduced performance of native infauna following recruitment to a habitat-forming invasive marine alga. Oecologia 158: 733-745

41. Gribben PE, Wright JT, O'Connor WA, Steinberg P (2009) Larval settlement preference of a native bivalve: the influence of an invasive alga versus native substrata. Aquatic Biology 7: 217-227

42. Harmelin-Vivien M, Harmelin JG, Francour P (1996) A 3-year study of the littoral fish fauna of sites colonized by *Caulerpa taxifolia* in the N.W. Medterranean (Menton, France) In: Ribera MA, Ballesteros E, Boudouresque CF, Gomez A, Gravez V (eds) Second International workshop on *Caulerpa taxifolia*. Publicacions Universitat Barcelona, p 391-397

43. Harries DB, Harrow S, Wilson JR, Mair JM, Donnan DW (2007) The establishment of the invasive alga *Sargassum muticum* on the west coast of Scotland: a preliminary assessment of community effects. Journal of the Marine Biological Association of the United Kingdom 87: 1057-1067

44. Hendriks IE, Bouma TJ, M*OR*ris EP, Duarte CM (2010) Effects of seagrasses and algae of the *Caulerpa* family on hydrodynamics and particle-trapping rates. Marine Biology 157:473-481

45. Hoffle H, Thomsen MS, Holmer M (2011) High m*OR*tality of *Zostera marina* under high temperature regimes but minor effects of the invasive macroalgae *Gracilaria vermiculophylla*. Estuarine Coastal and Shelf Science 92: 35-46

46. Holmer M, Marba N, Lamote M, Duarte CM (2009) Deterioration of Sediment Quality in Seagrass Meadows (*Posidonia oceanica*) Invaded by Macroalgae (*Caulerpa* sp.). Estuaries and Coasts 32: 456-466

47. Husa V, Sjotun K, Brattenb*OR*g N, Lein TE (2008) Changes of macroalgal biodiversity in sublittoral sites in southwest N*OR*way: impact of an introduced species or higher temperature? Marine Biology Research 4: 414-428

48. Ingolfsson A (2008) The invasion of the intertidal canopy-forming alga *Fucus serratus* L. to southwestern Iceland: Possible community effects. Estuarine Coastal and Shelf Science 77: 484-490

49. Irigoyen AJ, Eyras C, Parma AM (2011) Alien algae *Undaria pinnatifida* causes habitat loss for rocky reef fishes in north Patagonia. Biological Invasions 13: 17-24

50. Irigoyen AJ, Trobbiani G, Sgarlatta MP, Raffo MP (2011) Effects of the alien algae *Undaria pinnatifida* (Phaeophyceae, Laminariales) on the diversity and abundance of benthic macrofauna in Golfo Nuevo (Patagonia, Argentina): potential implications for local food webs. Biological Invasions 13: 1521-1532

51. Janiak DS, Whitlatch RB (2012) Epifaunal and algal assemblages associated with the native *Chondrus crispus* (Stackhouse) and the non-native *Grateloupia turuturu* (Yamada) in eastern Long Island Sound. Journal of Experimental Marine Biology and Ecology 413: 38-44

52. Jones E, Thornber CS (2010) Effects of habitat-modifying invasive macroalgae on epiphytic algal communities. Marine Ecology-Progress Series 400: 87-100

53. Kelly JR, Scheibling RE, Balch T (2011) Invasion-mediated shifts in the macrobenthic assemblage of a rocky subtidal ecosystem. Marine Ecology-Progress Series 437: 69-78

54. Klein JC, Verlaque M (2011) Experimental removal of the invasive *Caulerpa racemosa* triggers partial assemblage recovery. Journal of the Marine Biological Association of the United Kingdom 91: 117-125

55. Lang AC, Buschbaum C (2010) Facilitative effects of introduced Pacific oysters on native macroalgae are limited by a secondary invader, the seaweed *Sargassum muticum*. Journal of Sea Research 63: 119-128

56. Lawson SE, McGlathery KJ, Wiberg PL (2012) Enhancement of sediment suspension and nutrient flux by benthic macrophytes at low biomass. Marine Ecology-Progress Series 448: 259-270

57. Levi F, Francour P (2004) Behavioural response of *Mullus surmuletus* to habitat modification by the invasive macroalga *Caulerpa taxifolia*. Journal of Fish Biology 64: 55-64

58. Levin PS, Coyer JA, Petrik R, Good TP (2002) Community-wide effects of nonindigenous species on temperate rocky reefs. Ecology 83: 3182-3193

59. Lutz ML, Davis AR, Minchinton TE (2010) Non-indigenous macroalga hosts different epiphytic assemblages to conspecific natives in southeast Australia. Marine Biology 157: 1095-1103

60. Lyons DA, Scheibling RE (2007) Differences in somatic and gonadic growth of sea urchins (*Stronglyocentrotus droebachiensis*) fed kelp (*Laminaria longicruris*) or the invasive alga *Codium fragile* ssp *tomentosoides* are related to energy acquisition. Marine Biology 152: 285-295

61. Lyons DA, Scheibling RE (2007) Effect of dietary history and algal traits on feeding rate and food preference in the green sea urchin *Strongylocentrotus droebachiensis*. Journal of Experimental Marine Biology and Ecology 349: 194-204

62. Martinez-Luscher J, Holmer M (2010) Potential effects of the invasive species *Gracilaria vermiculophylla* on *Zostera marina* metabolism and survival. Marine Environmental Research 69: 345-349

63. McKinnon JG, Gribben PE, Davis AR, Jolley DF, Wright JT (2009) Differences in soft-sediment macrobenthic assemblages invaded by *Caulerpa taxifolia* compared to uninvaded habitats. Marine Ecology-Progress Series 380: 59-71

64. Molenaar H, Meinesz A, Thibaut T (2009) Alterations of the structure of *Posidonia oceanica* beds due to the introduced alga *Caulerpa taxifolia*. Scientia Marina 73: 329-335

65. Nohren E, Odelgard E (2010) Response of epibenthic faunal assemblages to varying vegetation structures and habitat patch size. Aquatic Biology 9: 139-148

66. Olabarria C, Incera M, Garrido J, Rossi F (2010) The effect of wrack composition and diversity on macrofaunal assemblages in intertidal marine sediments. Journal of Experimental Marine Biology and Ecology 396: 18-26

67. Olabarria C, Rodil IF, Incera M, Troncoso JS (2009) Limited impact of *Sargassum muticum* on native algal assemblages from rocky intertidal shores. Marine Environmental Research 67: 153-158

68. Pacciardi L, De Biasi AM, Piazzi L (2011) Effects of *Caulerpa racemosa* invasion on soft-bottom assemblages in the Western Mediterranean Sea. Biological Invasions 13: 2677-2690

69. Pederson HG, Johnson CR (2008) Growth and age structure of sea urchins (*Heliocidaris erythrogramma*) in complex barrens and native macroalgal beds in eastern Tasmania. Ices Journal of Marine Science 65: 1-11

70. Piazzi L, Balata D (2008) The spread of *Caulerpa racemosa* var. *cylindracea* in the Mediterranean Sea: An example of how biological invasions can influence beta diversity. Marine Environmental Research 65: 50-61

71. Piazzi L, Balata D (2009) Invasion of alien macroalgae in different Mediterranean habitats. Biological Invasions 11: 193-204

72. Piazzi L, Balata D, Cecchi E, Cinelli F (2003) Co-occurrence of *Caulerpa taxifolia* and *C. racemosa* in the Mediterranean Sea: interspecific interactions and influence on native macroalgal assemblages. Cryptogamie Algologie 24: 233-243

73. Piazzi L, Balata D, Ceccherelli G, Cinelli F (2005) Interactive effect of sedimentation and *Caulerpa racemosa* var. *cylindracea* invasion on macroalgal assemblages in the Mediterranean Sea. Estuarine Coastal and Shelf Science 64: 467-474

74. Piazzi L, Balata D, Cinelli F (2007) Invasions of alien macroalgae in Mediterranean coralligenous assemblages. Cryptogamie Algologie 28: 289-301

75. Piazzi L, Balata D, Foresi L, Cristaudo C, Cinelli F (2007) Sediment as a constituent of Mediterranean benthic communities dominated by *Caulerpa racemosa* var. *cylindracea*. Scientia Marina 71: 129-135

76. Piazzi L, Ceccherelli G (2006) Persistence of biological invasion effects: Recovery of macroalgal assemblages after removal of *Caulerpa racemosa* var. *cylindracea*. Estuarine Coastal and Shelf Science 68: 455-461

77. Piazzi L, Ceccherelli G, Cinelli F (2001) Threat to macroalgal diversity: effects of the introduced green alga *Caulerpa racemosa* in the Mediterranean. Marine Ecology-Progress Series 210: 149-159

78. Piazzi L, Cinelli F (2003) Evaluation of benthic macroalgal invasion in a harbour area of the western Mediterranean Sea. European Journal of Phycology 38: 223-231

79. Polte P, Buschbaum C (2008) Native pipefish *Entelurus aequoreus* are promoted by the introduced seaweed *Sargassum muticum* in the northern Wadden Sea, N*OR*th Sea. Aquatic Biology 3: 11-18

80. Prado P. Thibaut T (2008) Differences between epiphytic assemblages on introduced *Caulerpa taxifolia* and coexisting eelgrass (*Zostera capricorni*) in Botany Bay (NSW, Australia). Scientia Marina 72: 645-654

81. Raffo MP, Eyras MC, Iribarne OO (2009) The invasion of *Undaria pinnatifida* to a *Macrocystis pyrifera* kelp in Patagonia (Argentina, south-west Atlantic). Journal of the Marine Biological Association of the United Kingdom 89: 1571-1580

82. Relini G, Relini M, Torchia G (1998) Fish biodiversity in a *Caulerpa taxifolia* meadow in the Ligurian Sea. Italian Journal of Zoology 65: 465-470

83. Rodil IF, Olabarria C, Lastra M, Lopez J (2008) Differential effects of native and invasive algal wrack on macrofaunal assemblages inhabiting exposed sandy beaches. Journal of Experimental Marine Biology and Ecology 358: 1-13

84. Rohr NE, Thornber CS, Jones E (2011) Epiphyte and herbivore interactions impact recruitment in a marine subtidal system. Aquatic Ecology 45: 213-219

85. Rossi F, Incera M, Callier M, Olabarria C (2011) Effects of detrital non-native and native macroalgae on the nitrogen and carbon cycling in intertidal sediments. Marine Biology 158: 2705-2715

86. Sanchez I, Fernandez C (2005) Impact of the invasive seaweed *Sargassum muticum* (Phaeophyta) on an intertidal macroalgal assemblage. Journal of Phycology 41: 923-930

87. Sanchez I, Fernandez C, Arrontes J (2005) Long-term changes in the structure of intertidal assemblages after invasion by *Sargassum muticum* (Phaeophyta). Journal of Phycology 41: 942-949

88. Scheibling RE, Anthony SX (2001) Feeding, growth and reproduction of sea urchins (*Strongylocentrotus droebachiensis*) on single and mixed diets of kelp (*Laminaria* spp.) and the invasive alga *Codium fragile* ssp *tomentosoides*. Marine Biology 139: 139-146

89. Scheibling RE, Gagnon P (2006) Competitive interactions between the invasive green alga *Codium* fragile ssp *tomentosoides* and native canopy-forming seaweeds in Nova Scotia (Canada). Marine Ecology-Progress Series 325: 1-14

*90.* Schmidt AL, Scheibling RE (2006) A comparison of epifauna and epiphytes on native kelps (*Laminaria* species) and an invasive alga (*Codium fragile* ssp tomentosoides) in Nova Scotia, Canada. Botanica Marina 49: 315-330

91. Schmidt AL, Scheibling RE (2007) Effects of native and invasive macroalgal canopies on composition and abundance of mobile benthic macrofauna and turf-forming algae. Journal of Experimental Marine Biology and Ecology 341: 110-130

92. Siddon CE, Witman JD (2004) Behavi*OR*al indirect interactions: Multiple predator effects and prey switching in the rocky subtidal. Ecology 85: 2938-2945

93. Staehr PA, Pedersen MF, Thomsen MS, Wernberg T, Krause-Jensen D (2000) Invasion of *Sargassum muticum* in Limfjorden (Denmark) and its possible impact on the indigenous macroalgal community. Marine Ecology-Progress Series 207: 79-88

94. Strong JA, Dring MJ (2011) Macroalgal competition and invasive success: testing competition in mixed canopies of *Sargassum muticum* and *Saccharina latissima*. Botanica Marina 54: 223-229

95. Strong JA, Dring MJ, Maggs CA (2006) Colonisation and modification of soft substratum habitats by the invasive macroalga *Sargassum muticum*. Marine Ecology-Progress Series 321: 87-97

96. Strong JA, Maggs CA, Johnson MP (2009) The extent of grazing release from epiphytism for *Sargassum muticum* (Phaeophyceae) within the invaded range. Journal of the Marine Biological Association of the United Kingdom 89: 303-314

97. Sureda A, Box A, Deudero S, Pons A (2009) Reciprocal effects of caulerpenyne and intense herbivorism on the antioxidant response of *Bittium reticulatum* and *Caulerpa taxifolia*. Ecotoxicology and Environmental Safety 72: 795-801

98. Sureda A, Box A, Terrados J, Deudero S, Pons A (2008) Antioxidant response of the seagrass *Posidonia oceanica* when epiphytized by the invasive macroalgae *Lophodadia lallemandii*. Marine Environmental Research 66: 359-363

99. Tanner JE (2011) Utilisation of the Invasive Alga Caulerpa taxifolia as Habitat by Faunal Assemblages in the Port River-Barker Inlet Estuary, South Australia. Estuaries and Coasts 34: 831-838

100. Taylor SL, Bishop MJ, Kelaher BP, Glasby TM (2010) Impacts of detritus from the invasive alga *Caulerpa taxifolia* on a soft sediment community. Marine Ecology-Progress Series 420: 73-81

101. Thomsen MS (2010) Experimental evidence for positive effects of invasive seaweed on native invertebrates via habitat-formation in a seagrass bed. Aquatic Invasions 5: 341-346

102. Tomas F, Box A, Terrados J (2011) Effects of invasive seaweeds on feeding preference and performance of a keystone Mediterranean herbivore. Biological Invasions 13: 1559-1570

103. Trowbridge CD (2001) Coexistence of introduced and native congeneric algae: *Codium fragile* and *C. tomentosum* on Irish rocky intertidal shores. Journal of the Marine Biological Association of the United Kingdom 81:931-937

104. Trowbridge CD, Todd CD (2001) Host-plant change in marine specialist herbivores: Ascoglossan sea slugs on introduced macroalgae. Ecological Monographs 71: 219-243

105. Ulas A, Duzbastilar FO, Aydin C, Lok A, Metin C (2011) Determining Density of *Caulerpa racemosa* (Forsskal) J. Agardh and its effects on catch compositions of fishing gears. Turkish Journal of Fisheries and Aquatic Sciences 11: 385-391

106. Valentine JP, Johnson CR (2005) Persistence of the exotic kelp *Undaria pinnatifida* does not depend on sea urchin grazing. Marine Ecology Progress Series 285: 43-55

107. Vazquez-Luis M, Sanchez-Jerez P, Bayle-Sempere JT (2008) Changes in amphipod (Crustacea) assemblages associated with shallow-water algal habitats invaded by *Caulerpa racemosa* var. *cylindracea* in the western Mediterranean Sea. Marine Environmental Research 65: 416-426

108. Vazquez-Luis M, Guerra-Garcia JM, Sanchez-Jerez P, Bayle-Sempere JT (2009) Caprellid assemblages (Crustacea: Amphipoda) in shallow waters invaded by *Caulerpa racemosa* var. *cylindracea* from southeastern Spain. Helgoland Marine Research 63: 107-117

109. Vazquez-Luis M, Sanchez-Jerez P, Bayle-Sempere JT (2009) Comparison between amphipod assemblages associated with *Caulerpa racemosa* var. *cylindracea* and those of other Mediterranean habitats on soft substrate. Estuarine Coastal and Shelf Science 84: 161-170

110. Vazquez-Luis M, Sanchez-Jerez P, Bayle-Sempere JT (2010) Effects of *Caulerpa racemosa* var. cylindracea on prey availability: an experimental approach to predation of amphipods by *Thalassoma pavo* (Labridae). Hydrobiologia 654: 147–154

111. Viejo RM (1997) The effects of colonization by *Sargassum muticum* on tidepool macroalgal assemblages. Journal of the Marine Biological Association of the United Kingdom 77: 325-340

112. Wernberg T, Thomsen MS, Staehr PA, Pedersen MF (2004) Epibiota communities of the introduced and indigenous macroalgal relatives *Sargassum muticum* and *Halidrys siliquosa* in Limfjorden (Denmark). Helgoland Marine Research 58: 154-161

113. White LF, Shurin JB (2011) Density dependent effects of an exotic marine macroalga on native community diversity. Journal of Experimental Marine Biology and Ecology 405: 111-119

114. Wikstrom SA, Kautsky L (2004) Invasion of a habitat-forming seaweed: effects on associated biota. Biological Invasions 6: 141-150

115. Wikstrom SA, Pavia H (2004) Chemical settlement inhibition versus post-settlement mortality as an explanation for differential fouling of two congeneric seaweeds. Oecologia 138: 223-230

116. Wikstrom SA, Steinarsdottir MB, Kautsky L, Pavia H (2006) Increased chemical resistance explains low herbivore colonization of introduced seaweed. Oecologia 148: 593-601

117. Wlliam SL, Grosholz ED (2002) Preliminary reports from the *Caulerpa taxifolia* invasion in southern California. Marine Ecology Progress Series 233: 307-310

118. Wright JI, Gribben PE (2008) Predicting the impact of an invasive seaweed on the fitness of native fauna. Journal of Applied Ecology 45: 1540-1549

119. Wright JT, Byers JE, Koukoumaftsis LP, Gribben PE (2012) Differences in anti-predator traits of a native bivalve following invasion by a habitat-forming seaweed. Marine and Freshwater Research 63: 246-250

120. Wright JT, Byers JE, Koukoumaftsis LP, Ralph PJ, Gribben PE (2010) Native species behaviour mitigates the impact of habitat-forming invasive seaweed. Oecologia 163: 527-534

121. Wright JT, McKenzie LA, Gribben PE (2007) A decline in the abundance and condition of a native bivalve associated with *Caulerpa taxifolia* invasion. Marine and Freshwater Research 58: 263-272

122. York PH, Booth DJ, Glasby TM, Pease BC (2006) Fish assemblages in habitats dominated by *Caulerpa taxifolia* and native seagrasses in south-eastern Australia. Marine Ecology-Progress Series 312: 223-234