The following supplement accompanies the article

Artificial reefs do increase secondary biomass production: mechanisms evidenced by stable isotopes

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Marine Ecology Progress Series 509: 15–26 (2014)

Supplement. Additional stable isotope data for groups of organic matter sources (Table S1) and for consumer species (Table S2)

Table S1. $\delta^{13}C$ and $\delta^{15}N$ (mean and standard deviation) measured for all organic matter (OM) sources on artificial reefs. n SIA: number of stable isotope analyses performed for each species or OM pool. POM: particulate organic matter; SOM: sediment organic matter. Data for nano- and microphytoplankton were taken from Rau et al. (1990) and Darnaude et al. (2004), respectively

Group	Species	n SIA	$\delta^{13}C$		$\delta^{15}N$	
			Mean	SD	Mean	SD
Chlorobionta	*Bryopsis cupressina* J.V. Lamouroux	3	–17.62	0.73	3.62	0.29
	Caulerpa cylindracea Verlaque, Huissman and Boudouresque	24	–19.14	1.62	4.61	0.71
	Codium bursa C. Agardh	33	–14.68	1.31	4.44	1.13
	Codium vermillara Delle Chiaje	24	–19.43	2.05	4.28	0.38
Tracheophyta	*Posidonia oceanica* (Linnaeus) Dellile	49	–15.44	1.03	3.74	0.90
Chromobionta	*Cladostephus spongiosus* (Hudson) C. Agardh	12	–21.74	1.25	4.12	0.29
	Cystoseira zosteroides C. Agardh	6	–23.58	1.47	3.75	1.01
	Dictyopteris sp. J.V. Lamouroux	33	–20.91	3.11	3.58	0.91
	Dictyota dichotoma (Hudson) J.V. Lamouroux	48	–21.51	1.23	3.70	0.91
	Dictyota implexa (Desfontaine) J.V. Lamouroux	9	–19.37	0.73	3.06	0.61
	Halopteris sp. Kützing	24	–24.41	1.09	3.38	0.47
	Padina pavonica (Linnaeus) Thivy	18	–14.63	1.43	4.76	0.56
	Sporochnus pedunculatus (Hudson) C. Agardh	8	–30.48	2.50	2.82	1.37
	Taonia atomaria Woodward J. Agardh	9	–21.69	1.58	3.25	0.44
	Zardinia typus (Nardo) P.C. Silva	3	–20.67	0.81	2.94	0.23
Rhodobionta	*Asparagopsis armata* Harvey	3	–25.61	0.05	2.68	0.09
	Bonnemaisonia sp., C. Agardh	3	–31.30	0.08	3.46	0.11
	Bornetia secundiflora (J. Agardh) Thuret	3	–21.63	0.03	3.90	0.09
	Dudresnaya verticillata (Withering) Le Jol	3	–32.82	1.06	4.04	0.83
	Polysiphonia subulifera (C. Agardh) Harvey	21	–21.00	2.13	3.31	0.48
	Sphaeroccocus coronopifolius Stackhouse	24	–32.05	0.97	3.95	0.49
	Spyridia filamentosa (Wulfen) Harvey	3	–18.36	0.62	3.70	0.21
OM pools	Artificial reef POM	48	–24.18	0.85	5.13	0.90
	Artificial reef SOM	216	–21.95	0.57	3.67	0.25
	Huveaune River POM	24	–26.25	0.51	4.48	0.41
Pelagic producers	Nanophytoplankton (2–10 µm)	–	–25.23	1.16	1.77	0.25
	Microphytoplankton (>10 µm)	–	–22.70	0.76	3.17	1.25

Table S2. Mean isotopic ratios of consumers. N indiv: number of individuals analyzed for each species. n: unnumbered small individuals pooled together. HCA group (group issued from hierarchical clustering analysis and used in Table 1 and Fig. 2 in the main article): SB meso, sandy-bottom mesocarnivores; Macroc, macrocarnivores. Trophic group: Zoopk, zooplankton-feeding fish; Bent Inv, benthic invertebrate-feeding fish

Phylum, Class, Family	Species	N indiv	HCA group	Trophic group	$\delta^{13}C$		$\delta^{15}N$	
					Mean	SD	Mean	SD
Annelida, Polychaeta	*Chaetopterus variopedatus* (Renier, 1804)	56	*C. variopedatus*	Filter feeder	–22.17	1.09	3.60	0.46
Mollusca, Bivalvia	*Anomia ephippium* Linnaeus, 1758	27	Bivalves	Filter feeder	–22.05	1.93	3.78	0.34
	Hiatella artica (Linnaeus, 1767)	30	Bivalves	Filter feeder	–20.48	0.75	4.40	0.14
	Limaria hians (Gmelin, 1791)	13	Bivalves	Filter feeder	–22.65	0.44	3.68	0.14
	Mimachlamys varia (Linnaeus, 1758)	29	Bivalves	Filter feeder	–21.05	0.92	4.55	0.30
	Ostrea edulis Linnaeus 1758	25	Bivalves	Filter feeder	–21.52	0.73	3.57	0.68
Mollusca, Gastropoda	*Cerithium vulgatum* (Bruguière, 1792)	4	Gastropods	Grazer	–20.90	0.11	4.98	0.05
	Fissurela nubecula (Linnaeus, 1758)	7	Gastropods	Grazer	–18.30	0.88	5.02	0.50
	Jujubinus exasperatus (Pennant, 1777)	5	Gastropods	Grazer	–18.28	0.58	4.21	0.10
	Hexaplex trunculus (Linnaeus, 1758)	14	*H. trunculus*	Predator	–17.94	0.49	8.69	0.72
Arthropoda, Malacostracea	*Alpheus glaber* (Olivi, 1792)	n	Crustaceans	Omnivore	–21.30	0.73	5.83	0.35
	Athanas nitescens (Leach, 1813 [in Leach, 1813-1814])	n	Crustaceans	Omnivore	–20.90	0.88	6.05	0.30
	Dardanus sp. Paulson, 1875	13	Crustaceans	Omnivore	–20.93	0.90	6.00	0.54
	Galathea intermedia Liljeborg, 1831	19	Crustaceans	Omnivore	–21.61	0.71	4.96	0.42
	Palaemon sp. Weber, 1793	n	*Palaemon*	Predator	–19.93	0.55	7.44	0.46
	Palinurus elephas (Fabricius, 1787)	11	*Palinurus*	Omnivore	–20.00	0.57	5.76	0.81
	Pilumnus hirtellus (Linnaeus, 1761)	8	Crustaceans	Omnivore	–21.53	0.70	5.97	0.49
Echinodermata, Asteroidea	*Echinaster sepositus* (Retzius, 1783)	16	*E. sepositus*	Predator	–18.91	2.74	5.84	0.57
	Marthasterias glacialis (Linnaeus, 1758)	6	*M. glacialis*	Predator	–17.17	0.53	8.15	1.13
Echinodermata, Holothuridaea	*Holothuria tubulosa* Gmelin, 1791	11	*H. tubulosa*	Detritivore	–16.60	1.03	7.55	0.41
Chordata, Ascidiacea	*Ciona intestinalis* (Linnaeus, 1767)	35	Ascidians	Filter feeder	–21.23	0.71	5.29	0.51
	Halocyntia papillosa (Linnaeus, 1767)	19	Ascidians	Filter feeder	–21.87	1.41	5.59	0.58
	Phallusia mamillata (Cuvier, 1815)	17	Ascidians	Filter feeder	–22.62	0.70	5.69	0.61
Chordata, Actinopterigyii								
Carangidae	*Trachurus mediterraneus* (Steindachner, 1868)	5	Pelagic piscivores	Piscivore	–18.74	0.77	14.87	2.98
Centracanthidae	*Spicara maena* (Linnaeus, 1758)	10	Zoopk	Zoopk	–19.51	0.33	7.83	0.25
	Spicara smaris (Linnaeus, 1758)	9	Zoopk	Zoopk	–19.73	0.41	8.61	0.77
Labridae	*Coris julis* (Linnaeus, 1758)	13	Labrids	Bent Inv	–18.62	0.55	9.74	0.31
	Symphodus tinca (Linnaeus, 1758)	6	Labrids	Bent Inv	–18.78	0.84	9.55	0.52
	Symphodus mediterraneus (Linnaeus, 1758)	5	Labrids	Bent Inv	–19.25	0.26	9.17	0.52

Moronidae	*Dicentrarchus labrax* (Linnaeus, 1758)	4	Pelagic piscivores	Piscivore	–18.20	2.53	13.92	0.6
Mullidae	*Mullus surmuletus* Linnaeus, 1758	35	SB meso	Bent Inv	–17.88	0.72	9.94	0.67
Phycidae	*Phycis phycis* (Linnaeus, 1766)	3	Benthic piscivores	Piscivore	–17.95	0.30	10.73	0.33
Scorpaenidae	*Scorpaena notata* Rafinesque, 1810	33	Macroc	Bent Inv	–17.66	0.39	10.15	0.5
	Scorpaena porcus Linnaeus, 1758	28	Macroc	Bent Inv	–17.67	0.49	9.74	0.41
	Scorpaena scrofa Linnaeus, 1758	5	Benthic piscivores	Pisicvore	–18.07	0.22	10.06	0.23
Serranidae	*Serranus cabrilla* (Linnaeus, 1758)	20	Macroc	Bent Inv	–18.36	0.22	9.79	0.23
Soleidae	*Microchirus variegatus* (Donovan, 1808)	7	SB meso	Bent Inv	–18.14	0.34	10.20	0.14
Sparidae	*Boops boops (Linnaeus, 1758)*	33	Zoopk	Zoopk	–19.90	0.29	8.46	0.32
	Diplodus annularis (Linnaeus, 1758)	48	*Diplodus*	Bent Inv	–18.85	1.10	11.72	1.65
	Diplodus vulgaris (Geoffroy Saint-Hilaire, 1817)	20	*Diplodus*	Bent Inv	–18.14	0.78	11.59	0.83
	Diplodus sargus (Linnaeus, 1758)	5	*Diplodus*	Bent Inv	–18.77	0.69	11.54	0.73
	Pagellus acarne (Risso, 1827)	20	SB meso	Bent Inv	–17.76	0.60	10.64	0.56
	Pagellus erythrinus (Linnaeus, 1758)	20	SB meso	Bent Inv	–17.77	0.26	10.81	0.6
Sphyraenidae	*Sphyraena viridensis* Cuvier, 1829	5	Pelagic piscivores	Piscivore	–19.33	0.85	11.07	0.65
Synodontidae	*Synodus saurus* (Linnaeus, 1758)	3	Benthic piscivores	Piscivore	–18.30	0.46	10.50	0.79
Triglidae	*Trigloporus lastoviza* (Bonnaterre, 1788)	3	SB meso	Bent Inv	–17.90	0.56	9.76	1.07