Supplementary Material

Table S1: Full species list of flora and fauna sampled from April, May and June primed (P) and unprimed (UP) dropper sections for 2014 and 2015 and their occurrence per month (max. occurrence per month is 15)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **April 2014**  **P** | **April 2014 UP** | **May**  **2014 P** | **May 2014 UP** | **June 2014 P** | **June 2014 UP** | **April**  **2015 P** | **April**  **2015 UP** | **May**  **2015 P** | **May**  **2015 UP** | **June**  **2015 P** | **June**  **2015 UP** |
| **Phylum Ochrophyta** |  |  |  |  |  |  |  |  |  |  |  |  |
| Filamentous brown algae sp. | 7 | 10 | 1 | 14 | 4 | 10 | 12 | 15 |  | 14 | 1 | 11 |
| *Laminariales* juvenile |  |  |  | 9 |  | 15 |  | 12 |  | 14 | 5 | 12 |
| *Saccorhiza polyschides* |  |  |  |  |  | 3 |  |  |  | 4 |  | 4 |
| *Saccharina latissima* |  |  |  |  |  |  |  |  |  | 4 |  | 4 |
| *Desmarestia viridis* |  |  |  |  |  |  |  |  |  |  |  | 2 |
| **Phylum Rhodophyta** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Polysiphonia* sp. |  |  |  | 9 | 3 | 14 | 12 | 10 | 14 | 15 | 5 | 14 |
| *Ceramium* sp. |  | 2 | 2 | 12 | 3 | 15 | 4 | 3 | 7 | 14 | 4 | 15 |
| *Lomentaria clavellosa* |  |  |  |  |  | 1 | 2 | 1 | 3 | 6 | 1 | 8 |
| **Phylum Chlorophyta** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Ulva* sp. |  |  |  |  |  |  |  |  |  | 1 |  | 2 |
| **Phylum Cnidaria** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Hydrozoa** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obelia geniculata* |  | 1 | 13 | 15 | 4 | 4 | 8 | 7 | 15 | 14 | 11 | 9 |
| *Laomedea flexuosa* | 2 |  |  |  |  |  |  |  | 9 | 6 |  | 5 |
| *Ectopleura larynx* |  |  |  |  |  |  |  |  | 7 | 4 | 7 | 5 |
| *Dynamena* sp. |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| *Kirchenpaueria pinnata* |  |  |  |  |  |  |  |  |  |  | 1 |  |
| *Sarsia* sp. |  |  |  |  |  |  |  |  |  |  | 1 |  |
| **Phylum Bryozoa** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Gymnolaemata** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Electra pilosa* |  |  | 3 |  | 12 |  |  |  | 15 | 1 | 15 | 8 |
| *Membranipora membranacea* |  |  |  |  |  | 3 |  |  | 2 | 3 | 2 | 4 |
| *Vesicularia spinosa* |  |  |  |  | 4 |  |  |  |  |  | 6 | 2 |
| **Class Stenolaemata** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Crisia* sp. |  |  |  |  |  |  |  |  | 8 | 1 | 2 |  |
| **Phylum Echinodermata** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Asteroidea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Asterias* juvenile. |  |  | 5 | 1 | 6 |  |  |  | 5 |  | 2 |  |
| **Class Ophiuroidea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Opiuroidea* sp. |  |  |  |  | 1 |  |  |  |  |  |  |  |
| *Amphipholis squamata* |  |  |  |  |  |  |  |  | 1 |  |  |  |
| **Class Crinoidea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Crinoidea* sp. |  |  |  |  |  |  |  |  |  |  | 1 |  |

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| **Phylum Nematoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| Nematoda indent. |  |  | 5 | 8 | 4 | 14 | 5 | 11 | 15 | 15 | 15 | 15 |
| **Phylum Annelida** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Polychaete** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Myrianida* sp. | 1 | 1 | 7 | 11 | 10 | 14 | 2 | 1 | 9 | 1 | 14 | 10 |
| *Eusyllis blomstrandi* |  | 1 | 2 | 3 | 5 | 3 | 3 |  | 11 | 2 | 11 | 5 |
| *Polygordius appendiculatus* |  |  |  |  | 2 |  |  |  |  |  |  |  |
| *Eunidae* sp. |  |  |  |  | 1 |  |  |  |  |  |  |  |
| *Platynereis dumerilii* |  |  | 2 |  | 1 | 1 |  |  |  | 5 |  |  |
| *Harmothoe* sp. | 5 |  | 6 | 2 | 8 | 1 |  | 1 | 15 | 2 | 15 | 5 |
| *Spirobranchus triqueter* |  |  |  | 2 | 2 | 2 |  |  | 15 | 5 | 15 | 7 |
| *Eulalia viridis* |  |  | 2 | 3 | 2 |  |  |  |  |  | 9 | 4 |
| *Nereiphylla rubiginosa* |  |  |  | 1 | 1 |  |  |  | 4 | 1 | 9 | 3 |
| *Nereimyra punctata* |  |  |  |  | 6 |  |  |  | 1 |  | 4 |  |
| *Cossura* sp. |  |  |  |  | 1 |  |  |  |  |  |  |  |
| *Pseudopotamilla reniformis* |  |  |  |  |  |  |  |  |  |  | 1 |  |
| **Class Oligochaeta** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Oligochaeta* indent. |  |  |  |  |  |  |  |  | 1 | 3 |  | 4 |
| **Phylum Sipuncula** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Sipuncula* indent. |  |  |  |  | 1 | 1 |  |  |  | 2 |  | 2 |
| **Phylum Nemertea** |  |  |  |  |  |  |  |  |  |  |  |  |
| Nemertea indent. |  |  |  |  |  |  | 3 | 1 | 3 | 4 | 13 | 6 |
| **Phylum Arthropoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Acari* sp. |  |  |  |  |  | 2 | 2 | 1 | 1 |  |  |  |
| *Pycnogonida* indent. |  |  | 1 | 1 |  |  | 3 |  | 2 |  | 3 |  |
| Diptera larvae |  |  |  |  |  |  |  |  |  | 2 |  |  |
| *Anurida maritima* |  |  |  |  |  |  |  |  |  |  | 1 |  |
| **Phylum Crustacea** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Order Amphipoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Jassa* fem. | 15 | 12 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| *Jassa falcata* | 3 |  | 5 | 7 | 9 | 10 | 9 | 1 | 13 | 10 | 15 | 13 |
| *Parajassa pelagica* | 1 |  | 1 | 1 | 3 | 1 | 1 |  |  |  | 2 | 1 |
| *Gammarellus homari* | 4 | 2 |  | 1 | 1 |  | 10 |  | 5 |  | 2 | 1 |
| *Gammarus insensibilis* | 3 |  |  | 2 |  |  | 3 | 1 | 1 | 1 | 5 | 2 |
| *Aora gracilis* |  |  | 1 |  |  |  |  |  | 1 |  |  |  |
| *Aora* sp. |  |  | 1 |  |  |  |  | 1 | 1 |  |  | 3 |
| *Hardametopa nasuta* |  | 1 | 3 | 2 | 5 | 3 | 6 |  | 11 | 4 | 12 | 9 |
| *Elasmopus rapax* | 1 |  | 1 |  |  |  |  |  |  |  |  |  |
| *Dexaminidae* sp. |  |  |  |  | 1 |  |  |  |  |  |  |  |
| *Gitana sarsi* |  |  |  |  | 1 |  |  |  | 2 |  | 5 |  |
| **Suborder Caprellidea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Caprella septentrionalis* |  |  |  |  |  |  |  |  |  |  | 9 | 5 |
| *Caprella penantis* |  |  |  |  | 1 |  |  |  |  |  |  |  |
| *Caprella* juvenile |  |  |  |  |  |  |  |  |  |  | 8 | 4 |

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| **Order Isopoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Idotea granulosa* | 2 |  | 2 | 1 | 2 | 1 | 2 |  | 1 |  | 5 | 1 |
| *Idotea balthica* |  |  |  |  |  |  | 2 |  |  |  |  |  |
| *Idotea pelagica* |  |  | 1 |  | 6 | 2 |  |  |  | 2 |  | 1 |
| *Isopod* sp. |  |  |  |  | 1 |  |  |  | 1 |  |  |  |
| **Order Decapoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Pisidia longicornis* |  |  | 2 | 2 | 6 | 3 |  |  | 12 |  | 12 | 3 |
| *Necora puber* |  |  |  |  |  |  |  |  |  |  | 9 |  |
| Megalopore larvae |  |  |  |  |  |  |  |  |  |  | 4 | 3 |
| **Class Copepoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| Harpactocoida indent. | 8 | 8 | 15 | 15 | 3 | 15 | 13 | 13 | 14 | 15 | 14 | 15 |
| **Order Cumacea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Cumacea* indent. | 1 | 2 | 1 | 1 |  |  |  |  |  |  |  |  |
| **Class Ostrocoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Ostracoda* indent. |  |  | 2 | 6 | 1 | 7 |  |  |  | 2 | 2 | 1 |
| **Class Cirripedia** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Balanus* sp. |  |  | 2 | 1 | 3 |  |  |  |  | 1 | 2 | 2 |
| **Phylum Mollusca** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Gastropoda** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Rissoa parav* | 1 | 1 | 13 | 10 | 11 | 9 |  | 1 | 10 | 5 | 15 | 11 |
| *Lacuna vincta* |  |  | 6 | 8 | 2 | 4 |  |  | 3 | 4 | 2 | 1 |
| *Patella pellucida* |  |  |  |  |  | 1 |  |  |  |  |  |  |
| **Class Bivalvia** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Mytilus* sp. |  |  | 15 | 15 | 15 | 15 | 8 | 1 | 15 | 15 | 15 | 15 |
| *Musculus costulatus* |  |  |  |  |  | 1 | 3 | 2 | 3 | 1 | 3 | 1 |
| *Kellia suborbicularis* |  |  |  | 3 | 4 | 3 |  | 1 | 2 |  | 14 | 3 |
| *Anomia epipphium* |  |  |  |  | 5 | 1 |  |  |  |  | 15 | 1 |
| *Hiatella arctica* |  |  |  |  | 1 | 1 | 1 |  | 2 |  | 15 | 2 |
| *Turtonia minuta* | 2 |  |  |  |  |  |  |  |  |  |  |  |
| *Lasaea adansoni* |  |  | 1 |  |  |  |  |  |  |  |  |  |
| **Order Nudibranchia** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Polycera quadrilineata* |  |  | 7 | 4 |  |  | 6 | 7 | 15 | 6 | 11 | 4 |
| **Phyum Chordata** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Class Ascidiacea** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Ciona intestinalis* |  |  |  |  |  |  |  |  |  |  | 6 |  |
| **Class Actinoptergii** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Cyclopterus lumpus* | 1 |  |  |  |  |  | 1 |  |  |  |  |  |
| **Total number of species** | 16 | 11 | 31 | 31 | 42 | 33 | 25 | 22 | 42 | 38 | 52 | 49 |

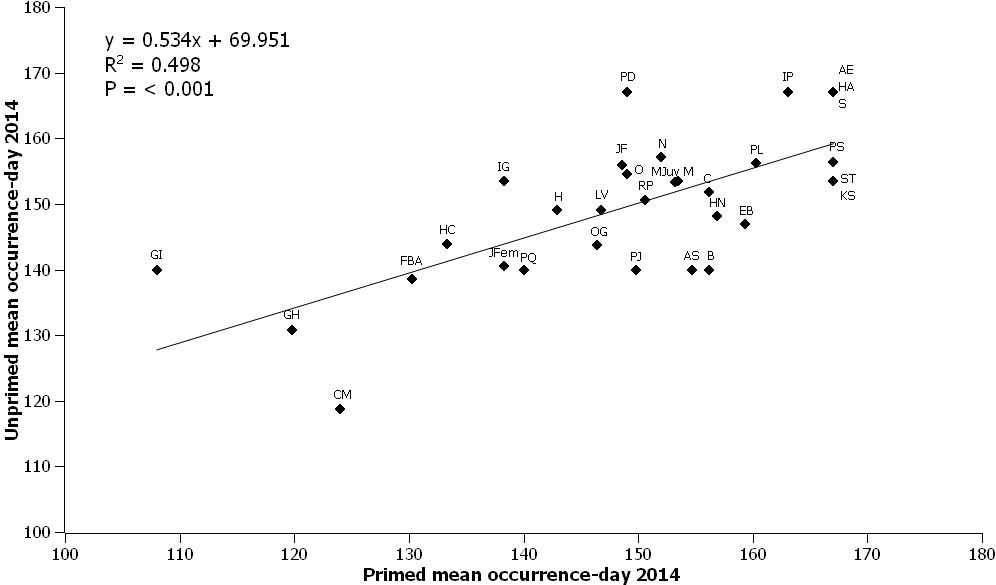


Fig. S1A. The relationship between mean day of year occurrences for all shared species in year 2014 for primed and unprimed treatments.

Legend: GI: *Gammarus insensibilis*; GH: *Gammarellus homari*; CM: Cumacea indent.; FBA: filamentous brown algae sp; HC: Harpacticoid Copepods; JFem: *Jassa* sp. female; IG: *Idotea granulosa*; PQ: *Polycera quadrilineata*; H: *Harmothoe* sp.; OG: *Obelia geniculata*; LV: *Lacuna vincta*; PJ: *Parajassa pelagica*; RP: *Rissoa parva*; JF: *Jassa falcata*; O: Ostracoda indent.; PD: *Platynereis dumerilii*; N: Nematoda indent.; MJuv- *Mytilus* sp. juvenile; M: *Myrianida* sp.; AS: *Asterias* sp.; B: *Balanus* sp.; C: *Ceramiales* sp; HN: *Hardametopa nasuta*; EB: *Eusyllis blomstrandi*; PL: *Pisidia longicornis*; IP: *Idotea pelagica*; AE: *Anomia epipphium*; HA: *Hiatella arctica*; S: Sipuncula indent.; PS: *Polysiphonia* sp; ST: *Spirobranchus triqueter*; KS: *Kellia suborbicularis*

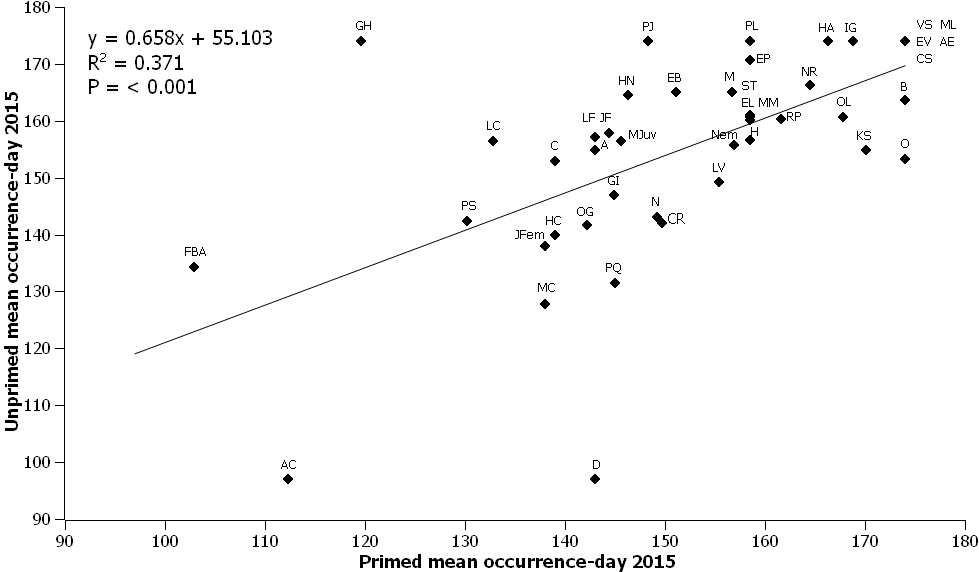


Fig. S1B. The relationship between mean day of year occurrences for all shared species in year 2015 for primed and unprimed treatments.

Legend: FBA: filamentous brown algae sp; AC: *Acari* sp.; GH: *Gammarellus homari*; PS: *Polysiphonia* sp; LC: *Lomentaria clavellosa*; JFem: *Jassa* sp. female; HC: Harpacticoid Copepods; OG: *Obelia geniculata*; MC: *Musculus costulatus*; C: *Ceramiales* sp; PQ: *Polycera quadrilineata*; D: *Dynamena* sp.; LF: *Laomedea flexuosa*; GI: *Gammarus insensibilis*; JF: *Jassa falcata*; A: *Aora* sp.; MJuv: *Mytilus* sp. juvenile; HN: *Hardametopa nasuta*; PJ: *Parajassa pelagica*; EB: *Eusyllis blomstrandi*; N: Nematoda indent.; C: *Crisia* sp.; LV: *Lacuna vincta*; Nem: Nemertea indent.; H: *Harmothoe* sp.; M: *Myrianida* sp.; ST: *Spirobranchus triqueter*; MM: *Membranipora membranacea*; EL: *Ectopleura larynx*; EP: *Electra pilosa*; PL: *Pisidia longicornis*; RP: *Rissoa parva*; NR: *Nereiphylla rubiginosa*; HA: *Hiatella arctica*; IG: *Idotea granulosa*; OL: *Oligochaeta* indent.; KS: *Kellia suborbicularis*; O: Ostracoda indent.; B: *Balanus* sp.; VS: *Vesicularia spinosa*; EV: *Eulalia viridis*; AE: *Anomia epipphium*; ML: Megalopore larvae; CS: *Caprella septentrionalis*