

**Table S3** Compiled settlement behaviour of marine macro organisms on topography with different size and scale

| Taxa                      | Macro             |            |            |              | Micro             |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   | Nano  |       |       | Hierarchical               |                                            |   |   |  |
|---------------------------|-------------------|------------|------------|--------------|-------------------|----------------------|---------------------------------|-----------------------------------|------------------------------------|---------------------|----------------------|-------------------------|--------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|------------------------|-----------------------------|-------------------------|-------------------------|------------|------------|------|-------------|----------------|------------------|-----------------|-------------------|-------|-------|-------|----------------------------|--------------------------------------------|---|---|--|
|                           | V-grooves 1-100mm | Holes ≥9mm | Holes <9mm | Bumps 2-10mm | V-Grooves 1 to 10 | V-Grooves >10 - <100 | Rec / Square - Grooves 0 to <50 | Rec / Square - Grooves 50 to <100 | Rec / Square - Grooves 100 to 1000 | Round grooves 0 - 1 | Round grooves >1 -50 | Round grooves >50 - 100 | Round grooves >100 - 500 | Sine wave - Grooves 1 to <5 | Sine wave - Grooves 8 - <16 | Sine wave - Grooves 16 <32 | Sine wave - Grooves 32 <64 | Sine wave - Grooves 64 | Sine wave - Grooves 125-130 | Sine wave - Grooves 256 | Sine wave - Grooves 512 | Riblets <5 | Riblets ≥5 | Mesh | Bumps 0 -10 | Bumps >10- 100 | Bumps / >100-500 | Peaks -30 to 60 | Peaks - 90 to 100 | Holes | Bumps | Peaks | Micro Peaks on Micro Bumps | Periodical Micro, Nano Sine wave - Grooves |   |   |  |
| Semibalanus balanoides    | ♣                 |            |            | ♣            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          | ▲                           |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ▲              | ●                | ●               | ♣                 | ●     | ▲     |       |                            |                                            | ▲ |   |  |
| Amphibalanus reticulatus  |                   |            |            |              |                   |                      | ▲                               |                                   | ▲                                  | ♣                   | ▲                    | ▲                       | ▲                        |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            | ▲ | ▲ |  |
| Balanus improvisus        |                   |            |            | ♣            |                   | ▲                    | ▲                               | ▲                                 |                                    |                     |                      |                         |                          | ◆                           |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ▲              | ●                | ●               | ♣                 | ●     | ▲     |       |                            |                                            | ▲ |   |  |
| Balanus sp                | ♣                 | ♣          | ♣          | ♣            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            | ▲ |   |  |
| Balanus amphitrite        |                   |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          | ◆                           | ♣                           | ♣                          | ♣                          | ▲                      | ▲                           | ▲                       | ♣                       | ▲          | ▲          |      |             |                |                  |                 |                   |       | ▲     | ◆     | ◆                          |                                            |   |   |  |
| tetraclita stalactifera   |                   |            | ♣          |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Mytilus edulis            | ♣                 |            |            | ♣            |                   |                      | ▲                               |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            | ▲                                          |   |   |  |
| Mytilus galloprovincialis |                   |            |            |              | ▲                 | ♣                    |                                 | ♣                                 | ♣                                  |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Perna canaliculus         | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Pinctada imbricata        |                   |            |            |              |                   |                      | ♣                               |                                   | ▲                                  | ♣                   | ♣                    | ▲                       | ▲                        |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Hiatella arctica          | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Anomia simplex            | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Anomia aculeata           | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Saccostrea glomerata      |                   |            |            |              |                   |                      |                                 | ▲                                 | ●                                  |                     |                      | ▲                       | ●                        |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Bugula neritina           | ♣                 | ♣          | ▲          | ♣            |                   |                      |                                 |                                   | ♣                                  | ♣                   | ●                    | ♣                       | ▲                        |                             | ♣                           | ♣                          | ♣                          | ▲                      | ♣                           | ▲                       | ♣                       |            |            |      |             |                |                  |                 |                   |       |       | ▲     | ▲                          |                                            |   |   |  |
| Membranipora membranacea  |                   | ◆          |            | ♣            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Obelia longissima         | ◆                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Tubularia larynx          | ◆                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Tubularia crocea          | ♣                 | ▲          |            | ♣            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Crambe crambe             | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Scopalina lophyropoda     | ♣                 |            |            |              |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Schizoporella errata      |                   | ♣          | ▲          | ♣            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Polydora sp.              |                   |            |            | ◆            |                   |                      | ▲                               |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ◆              | ◆                | ◆               |                   |       |       |       |                            |                                            |   | ◆ |  |
| Hydroides elegans         |                   |            |            |              |                   |                      | ◆                               |                                   |                                    | ♣                   | ◆                    | ♣                       | ▲                        | ▲                           | ♣                           | ♣                          | ▲                          | ▲                      | ♣                           | ♣                       | ♣                       |            |            |      |             |                |                  |                 |                   |       |       |       | ▲                          |                                            |   |   |  |
| Distaplia occidentalis    |                   |            | ♣          | ▲            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             |                |                  |                 |                   |       |       |       |                            |                                            |   |   |  |
| Zoothamnium commune       |                   |            |            | ▲            |                   |                      | ▲                               |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ▲              | ▲                | ▲               |                   |       |       |       |                            |                                            |   | ◆ |  |
| Vorticella sp.            |                   |            |            | ♣            |                   |                      | ▲                               |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ▲              | ♣                | ●               |                   |       |       |       |                            |                                            |   | ◆ |  |
| Suctorior                 |                   |            |            | ▲            |                   |                      |                                 |                                   |                                    |                     |                      |                         |                          |                             |                             |                            |                            |                        |                             |                         |                         |            |            |      |             | ▲              | ▲                | ▲               |                   |       |       |       |                            |                                            |   |   |  |

♣ Increases fouling 
 ▲ Inhibits fouling 
 ● No increase or decrease in fouling 
 ◆ Inconsistent results 
 □ No reviewed studies