Supplementary Material to the manuscript
"Influence of Light Intensity and Temperature on the Development of Early Life Stages of *Ascophyllum nodosum* (Phaeophyceae)"

Table S1. Tukey's multiple comparisons following the two-way ANOVA testing the effect of the factors Temperature (3 levels, fixed: 12, 15, and 18 °C) and Light intensity (2 levels, fixed: low light, high light) on egg germination.

| *Tukey's multiple comparisons test* | P- *values* |
|---|---|
| *12 L vs 12 H* | 0.9148 |
| *12 L vs 15 L* | 0.4011 |
| *12 L vs 15 H* | >0.9999 |
| *12 L vs 18 L* | 0.4119 |
| *12 L vs 18 H* | 0.9905 |
| *12 H vs 15 L* | 0.9334 |
| *12 H vs 15 H* | 0.9527 |
| *12 H vs 18 L* | 0.0663 |
| *12 H vs 18 H* | 0.9985 |
| *15 L vs 15 H* | 0.4813 |
| *15 L vs 18 L* | **0.0069** |
| *15 L vs 18 H* | 0.7606 |
| *15 H vs 18 L* | 0.3374 |
| *15 H vs 18 H* | 0.9972 |
| *18 L vs 18 H* | 0.1524 |

Table S2. Tukey's multiple comparisons following the two-way ANOVA testing the effect of the factors Temperature (2 levels, fixed: 12 and 18 °C) and Light intensity (2 levels, fixed: low light, high light) on rhizoids length.

| *Tukey's multiple comparisons test* | *P- values* |
|---|---|
| *12H v 12L* | **<0.0001** |
| *12H v 18L* | **<0.0001** |
| *12L v 18H* | **<0.0001** |
| *18H v 18L* | 0.3481 |
| *12H v 18H* | **0.0012** |
| *12L v 18L* | **<0.0001** |

Table S3. Tukey's multiple comparisons following the two-way ANOVA testing the effect of the factors Temperature (2 levels, fixed: 12 and 18 °C) and Light intensity (2 levels, fixed: low light, high light) on the area of embryos in February.

| *Tukey's multiple comparisons test* | *P- values* |
|---|---|
| *12L v 12H* | **<0.0001** |
| *12L v 18L* | **0.0009** |
| *12L v 18H* | 0.3773 |
| *12H v 18L* | 0.5937 |
| *12H V 18H* | **0.0027** |
| *18L V 18H* | 0.0698 |

Table S4. Tukey's multiple comparisons following the two-way ANOVA testing the effect of the factors Temperature (2 levels, fixed: 12 and 18 °C) and Light intensity (2 levels, fixed: low light, high light) on the area of embryos in March.

| *Tukey's multiple comparisons test* | *P- values* |
|---|---|
| *12L vs 12H* | **<0.0001** |
| *12L vs 18H* | 0.2403 |
| *12L vs 18L* | **0.0025** |
| *12H vs 18H* | **<0.0001** |
| *12 H vs 18 L* | **<0.0001** |