**Supplementary material**

**Table S1.** Model selection of the effects of the different abiotic variables on the presence of *Ae mariae* larvae. df = degrees of freedom; ΔAIC, Akaike’s information criterion difference with the best model; “+”, additive effect.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model** | **df** | **logLikelihood** | **AICc** | **ΔAIC** | **AIC weight** |
| Presence ~ 1 | 2 | -133.343 | 270.7 | 71.801 | 0 |
| Presence ~ pH | 3 | -108.866 | 223.8 | 24.901 | 0 |
| Presence ~ Salinity | 3 | -104.182 | 214.4 | 15.531 | 0 |
| Presence ~ Temperature | 3 | -130.908 | 267.9 | 68.983 | 0 |
| Presence ~ pH + Salinity | 4 | -95.961 | 200.1 | 1.165 | 0.358 |
| Presence ~ pH + Temperature | 4 | -108.643 | 225.4 | 26.528 | 0 |
| Presence ~ Salinity + Temperature | 4 | -103.495 | 215.1 | 16.227 | 0 |
| Presence ~ pH + Salinity +Temperature | 5 | -94.334 | 198.9 | 0 | 0.641 |

**Table S2.** Model selection of the effects of the biotic factors on the abundance of *Ae mariae* larvae. df = degrees of freedom; ΔAIC, Akaike’s information criterion difference with the best model; “+”, additive effect.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model** | **df** | **logLikelihood** | **AICc** | **ΔAIC** | **AIC weight** |
| Abundance~ 1 | 2 | -5930.423 | 11864.9 | 2870.16 | 0 |
| Abundance ~ algae | 6 | - 4542.023 | 9096.5 | 101.71 | 0 |
| Abundance ~ fauna | 3 | - 5673.600 | 11353.3 | 2358.57 | 0 |
| Abundance ~ *Posidonia* | 3 | - 5929.050 | 11864.2 | 2869.47 | 0 |
| Abundance ~ algae + fauna | 7 | - 4527.876 | 9070.3 | 75.56 | 0 |
| Abundance ~ algae + *Posidonia* | 7 | -4507.547 | 9029.6 | 34.90 | 0 |
| Abundance ~ fauna + *Posidonia* | 4 | - 5669.654 | 11347.5 | 2352.76 | 0 |
| Abundance ~ algae + fauna + *Posidonia* | 8 | - 4489.018 | 8994.7 | 0 | 1 |



**Figure S1.** Mean number of larvae in each sampling occasion (black dots) and mean water salinity in the same sampling occasions (grey triangles). Bars indicate the standard deviations of each measurement.



**Figure S2.** Mean number of larvae in each sampling occasion (black dots) and mean water temperature in the same sampling occasions (grey triangles). Bars indicate the standard deviations of each measurement.



**Figure S3.** Mean number of larvae in each sampling occasion (black dots) and mean water pH in the same sampling occasions (grey triangles). Bars indicate the standard deviations of each measurement.