

## Supplementary Material

### **Born small, die young: Intrinsic, size-selective mortality in marine larval fish**

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Table of contents

**Table S1. Compiled information about regressions reported in Fig. 2, 4, 5, 6 and 7**

Supplementary Table S1: Compiled information about regressions reported in Fig. 2, 4, 5, 6 and 7

| Figures                                                                                                                                                                                                                                           | Regression equations                      | Confidence interval (95% confidence bounds) |               | Goodness of fit   |                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------|---------------|-------------------|----------------------------------|
|                                                                                                                                                                                                                                                   |                                           | Regression coefficient (Slope)              | Intercept     | Adjusted R-square | One-tailed probability (P-value) |
| Figure 2A - Growth of sardine larvae reared in the laboratory under starvation                                                                                                                                                                    | $Y = 0.254 X + 3.86$                      | 0.246 - 0.262                               | 3.79 - 3.92   | 0.85              | 0.00007                          |
| Figure 4 – Relationship between otolith hatch check diameter ( $\mu\text{m}$ ) and larvae size-at-hatch (total length, $\text{mm}$ ) for sardine larvae reared in the laboratory under optimal feeding conditions                                 | $Y = 0.156 X + 1.96$                      | 0.114 - 0.198                               | 1.52 - 2.4    | 0.25              | 0.0007                           |
| Figure 5 – Relation between sardine larvae age (days post-hatch) and otolith first increment check diameter ( $\mu\text{m}$ ) for European sardine ( <i>Sardina pilchardus</i> ) larvae reared in the laboratory under optimal feeding conditions | 10th percentile:<br>$Y = 0.142 X + 9.38$  | 0.039 - 0.244                               | 9.28 - 9.48   | 0.6052            | 0.00003                          |
|                                                                                                                                                                                                                                                   | 50th percentile:<br>$Y = 0.088 X + 11.29$ | -0.014 - 0.190                              | 11.19 - 11.39 | 0.5232            | 0.0084                           |
|                                                                                                                                                                                                                                                   | 90th percentile:<br>$Y = 0.035 X + 13.2$  | -0.103 - 0.173                              | 13.09 - 13.30 | 0.393             | 0.013                            |
| Figure 6 – Relation between sardine larvae age (days post-hatching) and otolith first increment check diameter ( $\mu\text{m}$ ) for European sardine ( <i>Sardina pilchardus</i> ) larvae reared in the laboratory under starvation.             | 10th percentile:<br>$Y = 0.327 X + 8.13$  | 0.224 - 0.429                               | 8.03 - 8.23   | 0.694             | 0.000002                         |
|                                                                                                                                                                                                                                                   | 50th percentile:<br>$Y = 0.207 X + 10.68$ | 0.105 - 0.309                               | 10.58 - 10.78 | 0.723             | $< 10^{-10}$                     |
|                                                                                                                                                                                                                                                   | 90th percentile:<br>$Y = 0.087 X + 13.24$ | -0.015 - 0.189                              | 13.14 - 13.34 | 0.203             | 0.13                             |
| Figure 7 – Relation between sardine larvae age (Days post-hatching) and otolith first increment check diameter ( $\mu\text{m}$ ) for larvae captured in the Bay of Biscay.                                                                        | 10th percentile:<br>$Y = 0.12 X + 3.8$    | 0.015 - 0.225                               | 3.69 - 3.9    | 0.424             | 0.039                            |
|                                                                                                                                                                                                                                                   | 50th percentile:<br>$Y = 0.068 X + 5.8$   | -0.037 - 0.173                              | 5.69 - 5.90   | 0.563             | 0.007                            |
|                                                                                                                                                                                                                                                   | 90th percentile:<br>$Y = 0.017 X + 7.8$   | -0.088 - 0.122                              | 7.69 - 7.90   | 0.398             | 0.045                            |