

**Tab. S1** Comparative results of the morphometric and topographic analyses on the anterior lobe (AL) and anterior median lobe (AmL) of the shells of the shipworm *Teredo navalis*. n = number of measurements; SD = standard deviation; Sq = surface roughness; Ssk = surface skewness; Sku = surface kurtosis; Str = surface texture aspect ratio. The values were rounded to one decimal place. The width of ornaments refers to the width of the AL ornament perpendicular to the rows and the width of the AmL along the rows. The length refers to the AmL's ornament size perpendicular to the rows.

| Methodology  |           |                     | Anterior lobe |      |     | Anterior median lobe |      |     |
|--------------|-----------|---------------------|---------------|------|-----|----------------------|------|-----|
| Analysis     | Parameter |                     | n             | Mean | SD  | n                    | Mean | SD  |
| Morphometric | Ornament  | Width [μm]          | 236           | 40   | 6   | 433                  | 34   | 4   |
|              |           | Length [μm]         | -             | -    | -   | 504                  | 46   | 5   |
|              |           | Height [μm]         | 349           | 37   | 6   | 656                  | 26   | 4   |
|              |           | Spacing [μm]        | 505           | 104  | 30  | 1033                 | 34   | 6   |
|              |           | Valley width [μm]   | 207           | 45   | 35  | 152                  | 12   | 7   |
|              | Serration | Opening width [μm]  | 497           | 14   | 2   | 153                  | 9    | 1   |
|              |           | Size [μm]           | 206           | 9    | 1   | 153                  | 6    | 1   |
|              |           | Sharpness angle [°] | 109           | 86   | 4   | 74                   | 78   | 5   |
|              |           | Opening angle [°]   | 379           | 69   | 8   | 209                  | 67   | 7   |
| Topo-graphic | Surface   | Sq [μm]             | 48            | 12   | 2   | 53                   | 6    | 1   |
|              |           | Ssk                 | 36            | 0.4  | 0.1 | 54                   | -0.1 | 0.3 |
|              |           | Sku                 | 40            | 2.3  | 0.4 | 55                   | 3.1  | 0.5 |
|              |           | Str                 | 27            | 0.2  | 0.1 | 44                   | 0.4  | 0.2 |