

Supplementary material for Jégou et al. “**Phlorotannin and pigment content of native canopy-forming Sargassaceae species living in intertidal rockpools in Brittany (France): any relationship with their vertical distribution and phenology?**”

Table S1. Results of the two-way ANOVA (pigment levels as a function of the species and tidal height of settlement), Df: degree of freedom, Significant results are highlighted.

| | Chlorophyll <i>a</i> | | | Chlorophyll <i>c2</i> | | | Fucoxanthin | | |
|---------------------|----------------------|-------|------------------|-----------------------|------|--------------|-------------|-------|------------------|
| | Df | F | p | Df | F | p | Df | F | p |
| Species | 4 | 11.60 | <0.001 | 4 | 6.73 | 0.002 | 4 | 9.09 | <0.001 |
| Tidal height | 2 | 9.91 | 0.002 | 2 | 3.24 | 0.065 | 2 | 16.66 | <0.001 |
| Interaction | 1 | 0.08 | 0.778 | 1 | 1.25 | 0.280 | 1 | 2.46 | 0.136 |

| | β-carotene | | | Violaxanthin | | | Zeaxanthin | | |
|---------------------|-------------------|-------|------------------|---------------------|-------|--------------|-------------------|-------|------------------|
| | Df | F | p | Df | F | p | Df | F | p |
| Species | 4 | 13.05 | <0.001 | 4 | 5.20 | 0.007 | 4 | 15.53 | <0.001 |
| Tidal height | 2 | 2.36 | 0.126 | 2 | 3.64 | 0.049 | 2 | 0.47 | 0.634 |
| Interaction | 1 | 0.13 | 0.724 | 1 | 0.042 | 0.840 | 1 | 1.31 | 0.269 |

Table S2. Correlation between pigment levels according to Pearson’s test; all indicated values are significant ($p<0.001$), n.s.: no significant correlation (β -car: β -carotene; Chl: chlorophyll; Fuco: fucoxanthin; Viola: violaxanthin and Zea: zeaxanthin).

| | β -car | Chl <i>a</i> | Chl <i>c2</i> | Fuco | Viola | Zea |
|---------------|--------------|--------------|---------------|------|-------|------|
| β -car | - | 0.74 | 0.81 | 0.71 | 0.87 | n.s. |
| Chl <i>a</i> | | | 0.80 | 0.90 | 0.84 | n.s. |
| Chl <i>c2</i> | | | | 0.85 | 0.88 | n.s. |
| Fuco | | | | | 0.85 | n.s. |
| Viola | | | | | | n.s. |
| Zea | | | | | | - |

Table S3. Solvent gradient used during HPLC analysis of pigments in *Cystoseira*, *Ericaria* and *Gongolaria* species

| Time (min) | Flow (mL/min) | % A | % B | % C | Event |
|------------|------------------|-----|-----|-----|-----------------|
| 0 | 1 | 90 | 10 | 0 | Injection |
| 1 | 1 | 0 | 100 | 0 | Linear gradient |
| 11 | 1 | 0 | 78 | 22 | Linear gradient |
| 27.5 | 1 | 0 | 10 | 90 | Linear gradient |
| 29 | 1 | 0 | 100 | 0 | Linear gradient |
| 36 | 1 | 90 | 10 | 0 | Equilibration |