

Supplementary Materials: Interactions between Filter-Feeding Bivalves and Toxic Diatoms: Influence on the Feeding Behavior of *Crassostrea gigas* and *Pecten maximus* and on Toxin Production by *Pseudo-nitzschia*

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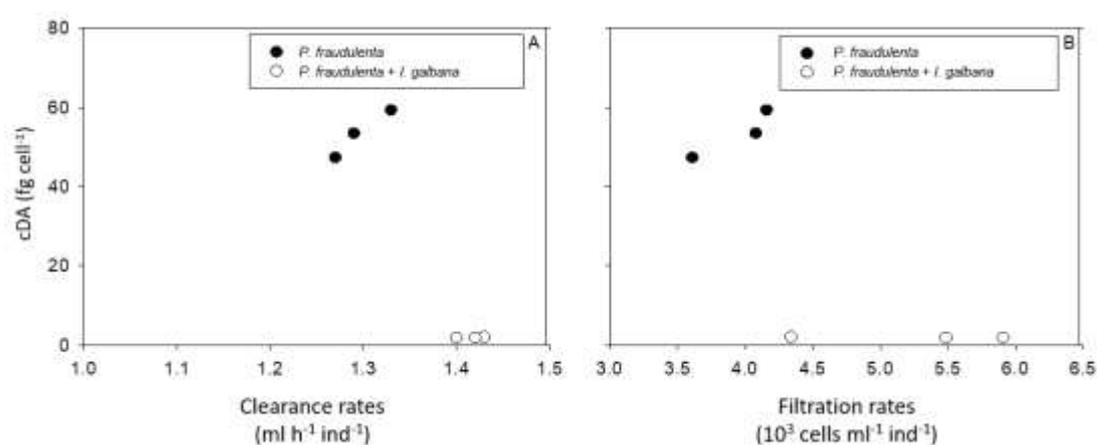


Figure S1. cDA concentrations in *P. fraudulenta* (fg cell⁻¹) as a function of the average clearance rates (mL h⁻¹ ind⁻¹, A) and the average filtration rates (cells mL⁻¹ ind⁻¹, B) of *C. gigas* over the 5 days of the experiment.

Table S1. Concentrations of dissolved domoic acid (dDA, pg mL⁻¹) in the media containing *P. australis* or *P. fraudulenta* at the beginning and the end of the exposure experiments. * significant difference with a p-value of 0.05.

| | | dDA (pg ml ⁻¹) | |
|------------------------|--|----------------------------|---------------------|
| | | <i>P. fraudulenta</i> | <i>P. australis</i> |
| with <i>C. gigas</i> | Initial | 0.04 ± 0.03 | 1.58 ± 0.29 |
| | <i>Pseudo-nitzschia</i> with <i>T. galbana</i> | 0.06 ± 0.02 | 1.59 ± 0.54 |
| | <i>Pseudo-nitzschia</i> alone | 0.05 ± 0.02 | 1.62 ± 0.24 |
| | Control | 0.05 ± 0.03 | 1.46 ± 0.27 |
| with <i>P. maximus</i> | Initial | 0.28 ± 0.08 | 2.15 ± 0.24 |
| | <i>Pseudo-nitzschia</i> with <i>T. galbana</i> | 0.36 ± 0.13 | 4.13 ± 0.90 * |
| | Control | 0.25 ± 0.02 | 2.33 ± 0.07 |

Table S2. Nutrient concentrations ($\mu\text{mol L}^{-1}$) in the culture medium in the control, at the beginning and the end of the *C. gigas* and *P. maximus* exposure experiments.

| | Conditions | Time (h) | Nutrient concentrations ($\mu\text{mol L}^{-1}$) | | | |
|---------------------------------------|--|----------|--|--------------------|-------------------|-------------|
| | | | NO_3^- | PO_4^{3-} | Si(OH)_4 | |
| Experiments with <i>C. gigas</i> | <u>Condition 1</u> <i>C. gigas</i> + <i>P. fraudulenta</i> + <i>T. galbana</i> | Initial | 0 h | 306 ± 65 | 22 ± 1 | 61 ± 5 |
| | | Final | 96 h | 304 ± 35 | 14 ± 1 | 34 ± 3 |
| | | Control | 96 h | 343 ± 9 | 18 ± 2 | 49 ± 7 |
| | <u>Condition 2</u> <i>C. gigas</i> + <i>P. australis</i> + <i>T. galbana</i> | Initial | 0 h | 559 ± 23 | 15 ± 2 | 84 ± 42 |
| | | Final | 120 h | 475 ± 74 | 14 ± 1 | 69 ± 13 |
| | | Control | 120 h | 294 ± 122 | 8 ± 1 | 52 ± 2 |
| | <u>Condition 3</u> <i>C. gigas</i> + <i>P. fraudulenta</i> | Initial | 0 h | 311 ± 12 | 16 ± 0.5 | 57 ± 8 |
| | | Final | 96 h | 305 ± 20 | 15 ± 1.5 | 32 ± 4 |
| | | Control | 96 h | 302 ± 22 | 11 ± 0.5 | 37 ± 3 |
| | <u>Condition 4</u> <i>C. gigas</i> + <i>P. australis</i> | Initial | 0 h | 305 ± 2 | 16 ± 0.5 | 57 ± 18 |
| | | Final | 120 h | 237 ± 11 | 12 ± 0.5 | 54 ± 3 |
| | | Control | 120 h | 360 ± 31 | 11 ± 1 | 36 ± 3 |
| Experiments with <i>P. maximus</i> | <u>Condition 1</u> <i>P. maximus</i> + <i>P. fraudulenta</i> + <i>T. galbana</i> | Initial | 0 h | 140 ± 16 | 13 ± 1 | 48 ± 3 |
| | | Final | 6 h | 117 ± 22 | 13 ± 3 | 41 ± 19 |
| | | Control | 6 h | 197 ± 13 | 14 ± 1 | 34 ± 7 |
| | <u>Condition 2</u> <i>P. maximus</i> + <i>P. australis</i> + <i>T. galbana</i> | Initial | 0 h | 304 ± 103 | 11 ± 1 | 86 ± 15 |
| | | Final | 6 h | 230 ± 152 | 7 ± 1 | 33 ± 3 |
| | | Control | 6 h | 229 ± 39 | 13 ± 2 | 35 ± 10 |