**Detection of the phycotoxin pectenotoxin-2 in waters around King George Island, Antarctica**

**Polar Biology**

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**Supplemental materials**

**Table S1.** Date, location and depth of phytoplankton sampling at Potter Cove.

**Table S2.** Limits of detection (LOD) of lipophilic toxins and domoic acid of the analysis of SPATT samplers during the sampling season 2014/2015.

**Figure S1.** Brunt-Väisälä frequency (N2) for the period between 1991 and 2016 (in black circles) and its standard deviation, for the months for which this information was available in the 2014-2015 period (in empty squares).

**Figure S2.** Daily presence “1” or absence “0” of fast ice from January 2014 to March 2015 in Potter Cove, Antarctica.

**Figure S3.** Relative abundance of 18S rRNA gene sequences assigned to class level obtained from seawater from Fildes Bay, KGI, in January 2013.

**Table S1.** Date, location and depth of phytoplankton sampling at Potter Cove.

|  |  |  |
| --- | --- | --- |
| **Date** | **Station**  | **Depth** |
| 7/1/2010 | E2  | 5 m |
| 11/1/2010 | E2  | 5 m |
| 18/1/2010 | E2 | 5 m |
| 25/1/2010 | E2 | 5 m |
| 3/2/2010 | E2 | 5 m |
| 11/2/2010 | E2 | 5 m |
| 18/2/2010 | E2 | 5 m |
| 25/2/2010 | E2 | 5 m |
| 4/1/2011 | E2 | 10 m |
| 8/1/2011 | E2 | 10 m |
| 15/1/2011 | E2 | 10 m |
| 21/1/2011 | E2 | 10 m |
| 31/1/2011 | E2 | 10 m |
| 20/2/2011 | E2 | 10 m |
| 5/3/2011 | E2 | 10 m |
| 27/1/12 | E3 | 10 m |
| 2/3/12 | E3 | 10 m |
| 30/3/12 | E3 | 10 m |
| 31/12/13 | E3 | 5 m |
| 2/1/14 | E3 | 10 m |
| 4/1/14 | E3 | 10 m |
| 8/1/14 | E3 | 10 m |
| 15/1/14 | E3 | 3 m |
| 16/1/2014 | E3 | 5 m |
| 12/1/2015 | E3 | 20 m |
| 5/1/2016 | E3 | 5 m |
| 13/1/16 | E3 | 5 m |
| 27/1/2016 | E3 | 5 m |

**Table S2.** Limits of detection (LOD) of lipophilic toxins and domoic acid of the analysis of SPATT samplers during the sampling season 2014/2015.

|  |  |
| --- | --- |
| Toxin | LOD [ng SPATT-1] |
| Domoic acid | 0.45 |
| Gymnodimine | 0.08 |
| 13-desmethyl spirolide C | 0.22 |
| Okadaic acid | 8.00 |
| Dinophysistoxin-1 | 6.00 |
| Pectenotoxin-2 (PTX-2) | 1.00 |
| Yessotoxin (YTX) | 1.50 |
| Azaspiracid-1 | 0.11 |



**Figure S1.** Brunt-Väisälä frequency (N2) for the period between 1991 and 2016 (in black circles) and its standard deviation, for the months for which this information was available in the 2014-2015 period (in empty squares).



**Figure S2.** Daily presence “1” or absence “0” of fast ice from January 2014 to March 2015 in Potter Cove, Antarctica.



**Figure S3.** Relative abundance of 18S rRNA gene sequences assigned to class level obtained from seawater from Fildes Bay, KGI, in January 2013.