

Supplementary Materials: Twenty-Five Years of PSP Toxicity in Galician (NW Spain) Bivalves: Spatial, Temporal, and Interspecific Variations

Juan Blanco, Ángeles Moroño, Fabiola Arévalo, Jorge Correa, Covadonga Salgado, Yolanda Pazos, Silvia Calvo and Araceli Escudeiro Rossignoli

Table S1. Percentage of the total number of samples analyzed corresponding to each bivalve species.

Species	Samples	%
<i>M. galloprovincialis</i> Raft	56629	76.8
<i>M. galloprovincialis</i> Wild	10044	13.6
<i>C. edule</i>	3333	4.5
<i>V. corrugata</i>	949	1.3
<i>R. philippinarum</i>	786	1.1
<i>E. arcuatus</i>	752	1.0
<i>P. rhomboides</i>	365	0.5
<i>E. siliqua</i>	379	0.5
<i>A. opercularis</i>	262	0.4
<i>R. decussatus</i>	140	0.2
<i>O. edulis</i>	78	0.1
<i>M. gigas</i>	23	0.0

Table S2. Percentage of samples of each bivalve species obtained each month

Species	Month											
	Jan	Feb	Mar	May	Apr	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>M. galloprovincialis</i> Raft	8	7.6	8.9	8.5	8.1	8.1	8.5	8.2	8.5	8.6	8.9	7.9
<i>M. galloprovincialis</i> Wild	9.8	9.4	10.3	8.8	7.6	7.2	7	7.2	7.9	8.1	8.2	8.4
<i>V. corrugata</i>	7.6	5.6	6.5	6.6	5.9	7.6	10	8.7	11	12.9	9.3	8.3
<i>R. decussatus</i>	1.4	2.1	2.1	7.1	10.7	19.3	10	12.9	10.7	8.6	3.6	11.4
<i>R. philippinarum</i>	2.5	1.8	2.3	6.6	11.1	13.6	13.9	13.2	11.1	9.8	8.5	5.6
<i>P. rhomboides</i>	3	0.5	3	7.4	9.9	6.6	14	11	12.6	14.5	10.1	7.4
<i>C. edule</i>	2.9	2.2	2.9	7.4	10.2	12.1	12	11.7	13	11.9	8.6	5.1
<i>E. siliqua</i>	0.3	1.1	2.4	3.2	13.2	15	19.5	22.7	14.5	4.7	2.6	0.8
<i>E. arcuatus</i>	1.3	0.4	1.5	5.6	12.8	14.8	16.6	9.2	16.2	10.8	5.9	5.1
<i>M. gigas</i>	0	0	0	0	13	13	17.4	21.7	26.1	8.7	0	0
<i>O. edulis</i>	7.7	6.4	2.6	3.8	14.1	1.3	3.8	3.8	5.1	5.1	38.5	7.7
<i>A. opercularis</i>	9.2	5.7	5.7	5	6.1	1.1	1.9	3.8	6.5	19.1	24.8	11.1

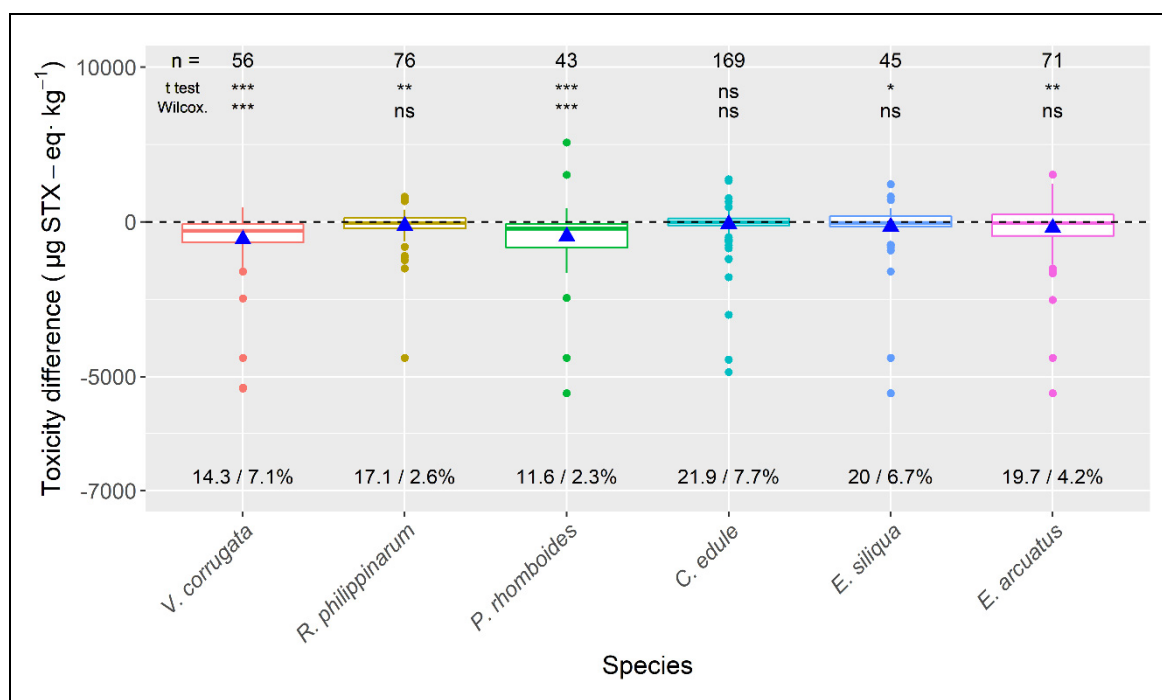


Figure S1. Differences of PSP toxicity between the main bivalves and wild mussels sampled from the same area at the same week. Symbols as in Figure 3. Number in the bottom line are the percentages of samples which tested PSP positive when it was not detected in mussel (first number) or when it was detected below the regulatory level (second number).

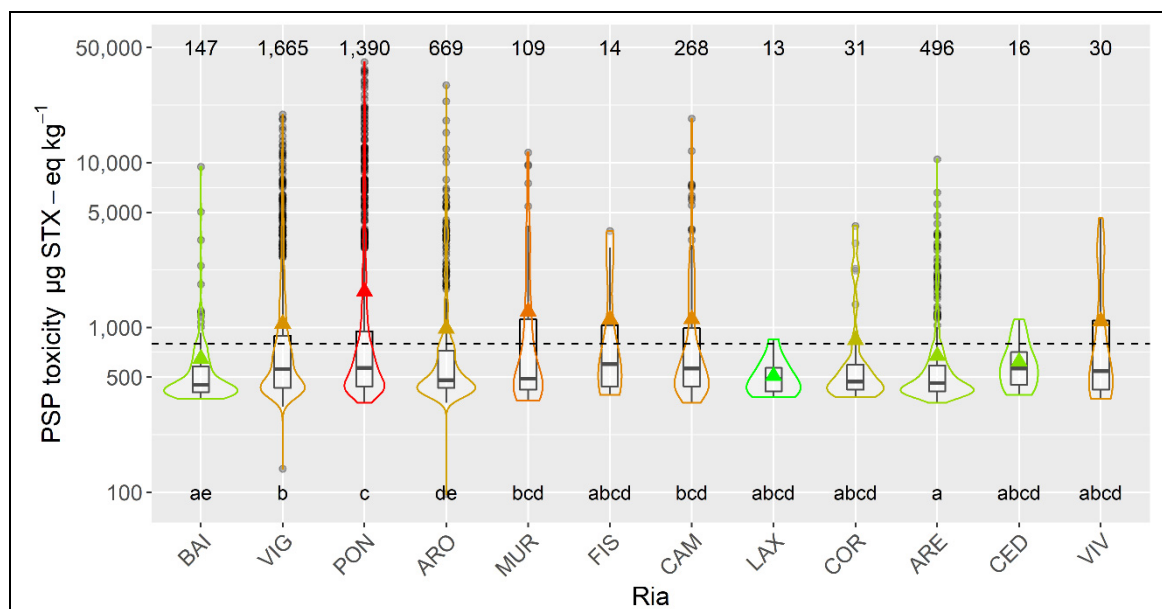


Figure S2. PSP toxicity in the main bivalve species during the toxic episodes in the Galician rías. All symbols as in Figure 3.

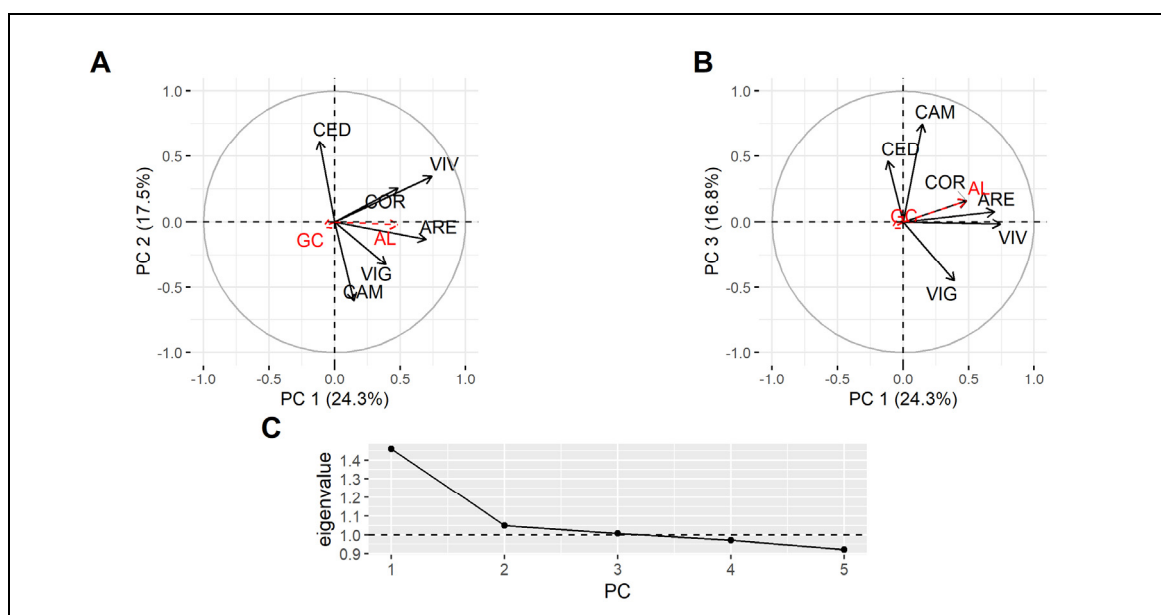
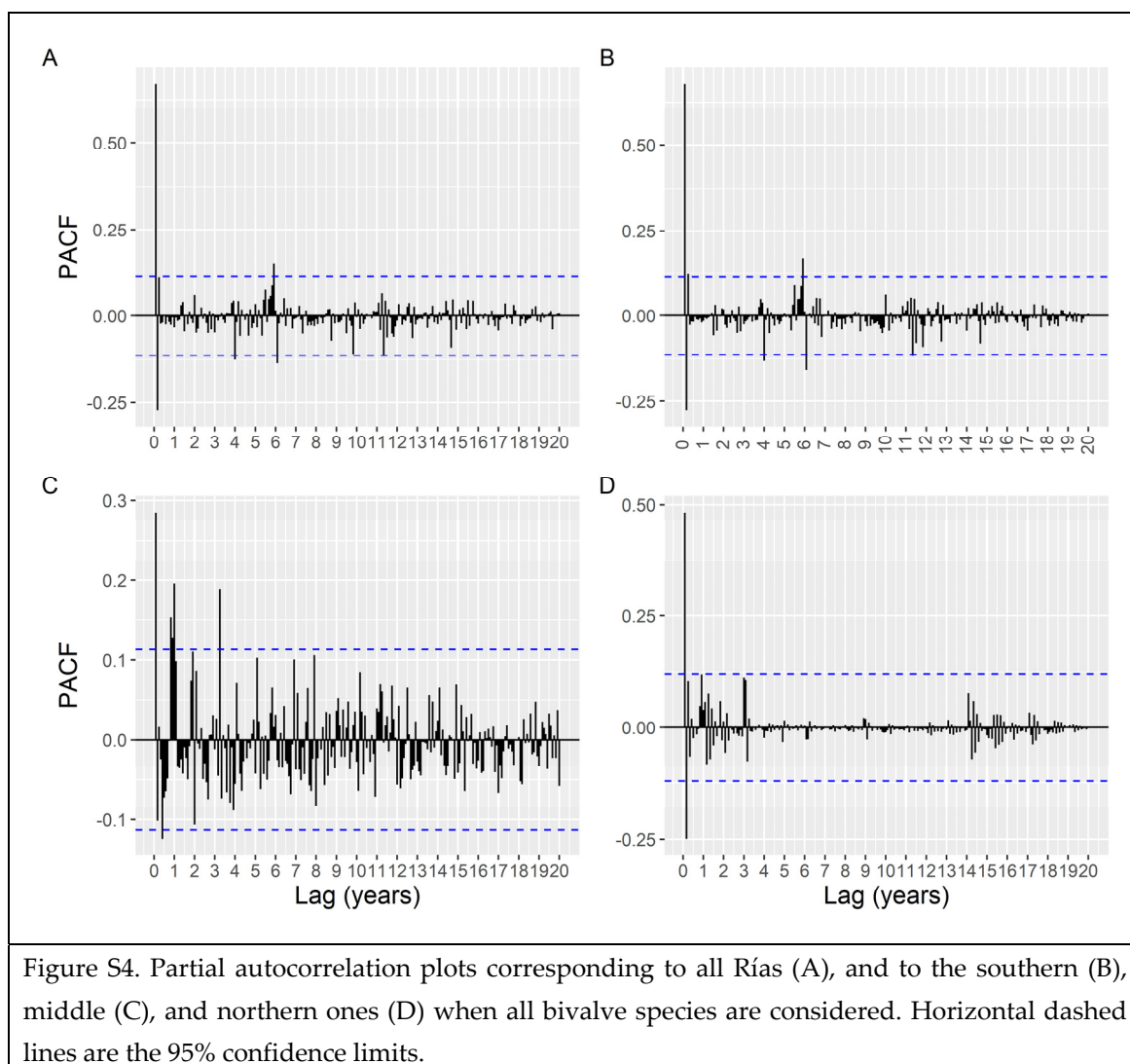
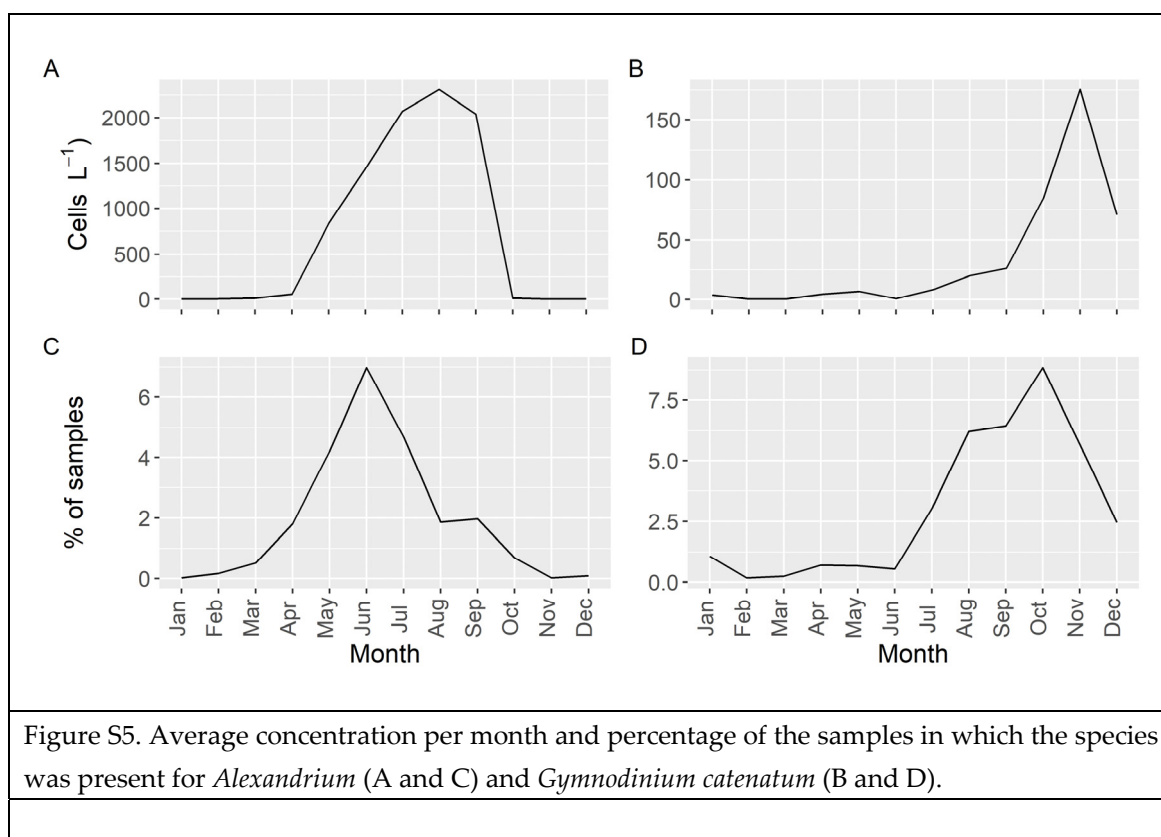


Figure S3. Loadings of the four principal components and their corresponding eigenvalues after excluding raft mussels from the analysis. AL and GC are the abundances of *Alexandrium* spp and *Gymnodinium catenatum*, and are supplementary variables which were not included in the analysis.





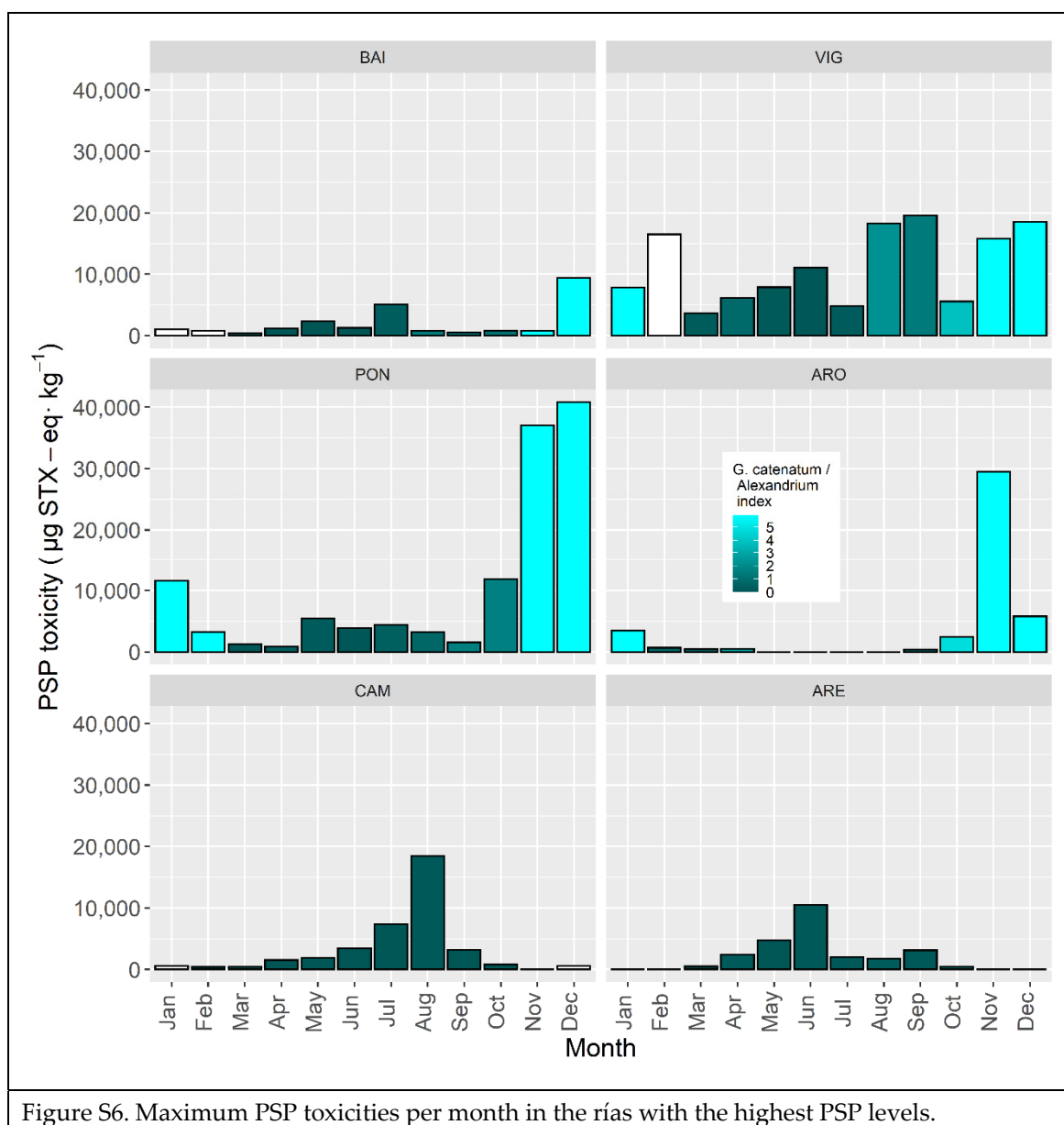


Figure S6. Maximum PSP toxicities per month in the rías with the highest PSP levels.

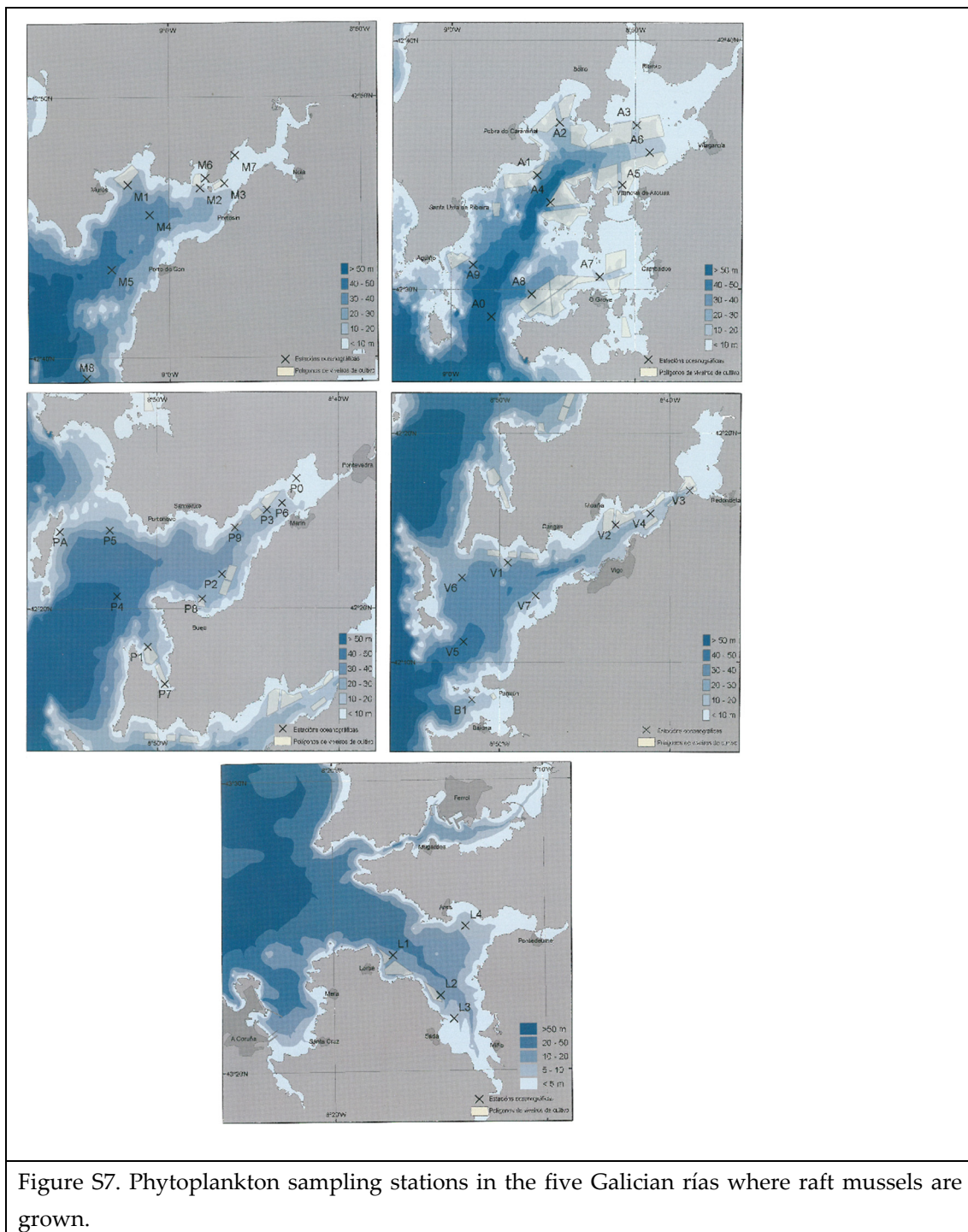


Figure S7. Phytoplankton sampling stations in the five Galician rías where raft mussels are grown.