

# Supplementary material: Detection and spatio-temporal distribution of pinnatoxins in shellfish from the Atlantic and Cantabrian coasts of Spain

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**Table S1.** ANOVA and TukeyHSD post-hoc tests of the differences in PnTX G concentration between habitats (Wild mussel – Raft mussel) and between species, using logarithmically transformed data.

```
LMlogspecies<-lm(log(Pinna.G)~ESPECIE2,data=pinna)
> AOVlogspecies=aov(LMlogspecies)
> summary(AOVlogspecies)
```

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	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ESPECIE2	5	27.34	5.467	14.39	2.87e-12
Residuals	231	87.77	0.380	-	-

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
544 observations deleted due to missingness  
> TukeyHSD(AOVlogspecies)  
Tukey multiple comparisons of means  
95% family-wise confidence level

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```
Fit: aov(formula = LMlogspecies)
$ESPECIE2
```

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	diff	lwr	upr	p adj
Wild mussel-Raft mussel	0.7867092	0.4937221	1.07969617	0.0000000
E.siliqua-Raft mussel	-0.0776424	-1.8539975	1.69871274	0.9999956

P. rhomboides-Raft mussel	1.9849530	0.2085978	3.76130811	0.0186416
Vp. corrugata-Raft mussel	0.7231904	-0.1723991	1.61877983	0.1900166
C. edule-Raft mussel	0.0387578	-0.6438011	0.72131669	0.9999838
E.siliqua-Wild mussel	-0.8643516	-2.6548885	0.92618543	0.7346804
P. rhomboides-Wild mussel	1.1982438	-0.5922932	2.98878079	0.3906575
Vp. corrugata-Wild mussel	-0.0635188	-0.9869177	0.85988015	0.9999580
C. edule-Wild mussel	-0.7479514	-1.4666110	-0.02929167	0.0360024
P. rhomboides-E.siliqua	2.0625954	-0.4425232	4.56771390	0.1726591
Vp. corrugata-E.siliqua	0.8008328	-1.1796373	2.78130285	0.8543170
C. edule-E.siliqua	0.1164002	-1.7772914	2.01009181	0.9999760
Vp. corrugata-P. rhomboides	-1.2617626	-3.2422327	0.71870748	0.4479777
C. edule-P. rhomboides	-1.9461952	-3.8398868	-0.05250356	0.0400554
C. edule-Vp. corrugata	-0.6844326	-1.7947077	0.42584256	0.4861949

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**Table S2.** Regression analysis of the relationship between % of esterification and total PnTX G in mussels, with logarithmically transformed data.

```
> REGPorcEst_TotalMejLog<-lm(log10(PercEsterif)~log10(Pinna.Hidro), data= pinnaHidrolMej)
> summary(REGPorcEst_TotalMejLog) # casi significativo pero no
```

```
Call:
lm(formula = log10(PercEsterif) ~ log10(Pinna.Hidro), data = pinnaHidrolMej)
```

Residuals:

Min	1Q	Median	3Q	Max
-0.31066	-0.05422	0.04196	0.10338	0.31915

Coefficients:

	Estimate	Error t	value	Pr(> t )
(Intercept)	0.9333	0.1639	5.693	7.38e-05
log10(Pinna.Hidro)	0.3655	0.2031	1.799	0.0953

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1743 on 13 degrees of freedom  
 Multiple R-squared: 0.1993, Adjusted R-squared: 0.1377  
 F-statistic: 3.236 on 1 and 13 DF, p-value: 0.09527