Table S1 Results of the analysis of variance (ANOVA) and SNK multiple comparison tests for cell density, growth rate between days 0 and 8 of culture ( $\mu$ 0-8) and maximum growth rate ( $\mu$ ) of *Pseudo-nitzschia multiseries* and *Bacillaria* sp. Mean values were compared across treatments that received the addition of distinct iron (*Fe*) concentrations, in nmol.L<sup>-1</sup> (Tr: +0Fe; +1.7Fe; +10Fe; +11,700Fe). For *Bacillaria* sp., an extra treatment (+1.7Fe+Psm) was created with the addition of 1.7 nmol Fe.L<sup>-1</sup> and the dissolved cell content from a *P. multiseries* culture containing 52 ng DA.mL<sup>-1</sup> and other undetermined compounds. Significant terms of interest ( $\alpha$  = 0.05) are highlighted in bold.

	P. mult	iseries cell densi	ty		Bacillaria sp. cell density					
	df	MS	F	p	df	MS	F	p		
Tr	3	233543906	3.0955	0.0675	4	70867500	6.3477	0.0176		
Residual	12	75446719			7	11164286				
SNK test	_				+0Fe = +	+1.7Fe = +10Fe =	+11,700Fe =	= +1.7Fe+Psm		
	P. mult	iseries growth ra	ite (μ₀-8)		Bacilla	Bacillaria sp. growth rate (μ <sub>0-8</sub> )				
	df	MS	F	p	df	MS	F	р		
Tr	3	0.0098	2.5812	0.1020	4	0.0237504	20.772	0.0006		
Residual	12	0.0038			7	0.0011434				
SNK test	_				+0Fe = -	+1.7Fe = +10Fe =	+11,700Fe>	>+1.7Fe+Psm		
	P. multiseries maximum growth rate (μ)				Bacilla	Bacillaria sp. maximum growth rate (μ)				
	df	MS	F	p	df	MS	F	p		
Tr	3	0.0303	2.0327	0.1631	4	0.1992	8.057	0.0093		
Residual	12	0.0149			7	0.0247				
SNK test	_				+0Fe = +	+0Fe = +1.7Fe = +10Fe = +11,700Fe > +1.7Fe+Psm				

**Table S2** Results of the analysis of variance (ANOVA) and SNK multiple comparison tests for intra- and extracellular domoic acid (DA) concentrations. Mean values were compared across treatments that received the addition of distinct iron (Fe) concentrations, in nmol.L<sup>-1</sup> (Tr: +0Fe; +1.7Fe; +10Fe; +11,700Fe), sampling times (Tm: 4; 8; 17; 30 d), and the interaction between them. Significant terms of interest ( $\alpha$  = 0.05) are highlighted in bold.

	DA (pg.cell <sup>-1</sup> )								
	Intracellular			Extracellular					
	Df	MS	F	p	SNK	MS	F	p	SNK
Tr	3	1.89	6.66	7.5×10 <sup>-4</sup>	+10Fe=+1.7Fe=+0Fe<+11,700Fe	1.91	1.009	0.39	N/A*
Tm	3	33.1	116.6	2.2×10 <sup>-16</sup>	4<8<17<30	41.08	21.60	5.4×10 <sup>-9</sup>	8=4=30<17
Tr×Tm	9	0.48	1.70	0.11	N/A*	3.18	1.67	0.12	N/A*

<sup>\*</sup> N/A: not applicable.

**Table S3** Results of the analysis of variance (ANOVA) and SNK multiple comparison tests for the total ( $\mu$ g.L<sup>-1</sup>) and intracellular (pg.cell<sup>-1</sup>) chlorophyll-a concentrations in *Bacillaria* sp. cultures. Mean values were compared across treatments that received the addition of distinct iron (*Fe*) concentrations (nmol.L<sup>-1</sup>), or iron and the dissolved cell content from a *P. multiseries* (Psm) culture (Tr: +0; +1.7; +10; +11,700; and +1.7+Psm), sampling times (Tm: 4; 8; 17; 30 d), and the interaction between them. Significant terms of interest (T0.05) are highlighted in bold. See methods for details.

	Total chlorophyll-a (μg.L <sup>-1</sup> )						Intracellular chlorophyll-a (pg.cell <sup>-1</sup> )			
•	Df	MS	F	P	SNK	MS	F	P	SNK	
Tr	4	0.55	4.19	0.012		0.86	3.30	0.03		
Tm	3	9.27	70.6	8.1x10 <sup>-11</sup>		0.41	1.57	0.22		
			17.5	4.8x10 <sup>-8</sup>	Day 04: +1.7+Psm=+0=+10<+1.7<+11,700		3.33	8.5x10 <sup>-3</sup>	Day 04: +0=+1.7+Psm=+10<+1.7<+11,700	
ТуТ	10	2.20			Day 08: +1.7+ <i>Psm</i> <+0<+10=+1.7<+11,700	0.86			Day 08: +0=+10=+1.7+Psm=+1.7<+11,700	
Tr×Tm	12	2.30			Day 17: +1.7+Psm=+11,700=+0=+10=+1,7				Day 17: +10=+1.7+Psm=+0=+11,700=+1.7	
					Day 30: +11,700<+0=+1,7<+10=+1.7+Psm				Day 30: +11,700<+1.7=+0=+1.7+Psm<+10	