## **Supplementary material**

## Occurrence characteristics of harmful and non-harmful algal species related to coastal environments in the southern sea of Korea

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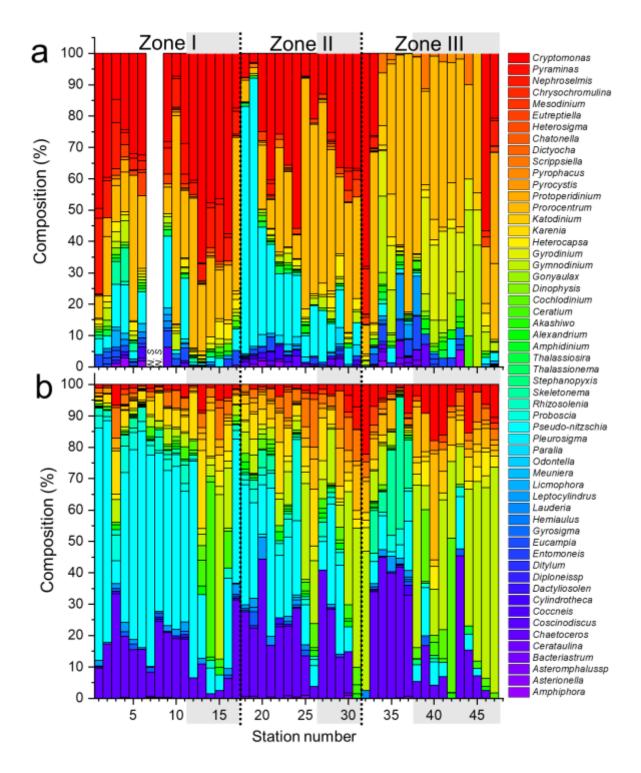
Table S1. The direction and maximum speed of wind in the Busan area from 6 to 20 August 2016

The sampling dates were 9 June and 11 August. W, westward; S, southward; N, northward; E, eastward. Bold indicates dominance of southward wind

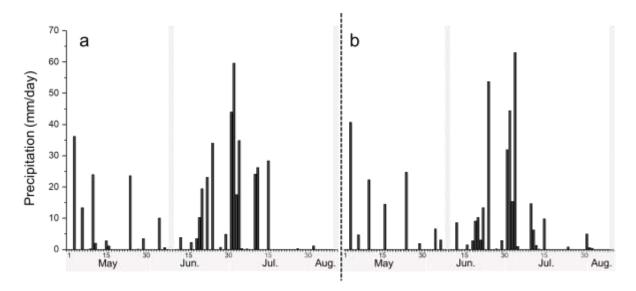
Month	Day	Tongyeong			Geoje		
		Average	Wind	Maximum	Average	Wind	Maximum
		$(m s^{-1})$	direction	$(m s^{-1})$	$(m s^{-1})$	direction	$(m s^{-1})$
June	1	2	NNE	4.8	3.7	ESE	5.9
	2	2.3	SSE	4.5	1.7	SE	3.9
	3	1.6	SSE	3.9	1.6	SSW	4.1
	4	1.6	SSE	3.7	1.3	ESE	4.1
	5	2.6	N	5.6	2.2	ESE	4.4
	6	2.4	NNW	5.5	1.7	E	3.2
	7	2.2	SE	4.9	1.2	SSW	3.3
	8	1.5	SE	3.6	1.2	SSW	4.8
	9	1.5	SSE	5.1	2	SE	5
August	3	1.8	SSE	3.4	1.1	ESE	2.7
	4	2.2	SE	6.6	2.1	E	4.1
	5	2	N	3.6	2	ESE	3.8
	6	1.8	NNE	3.3	1.6	E	3.5
	7	1.8	SE	4.7	1.3	SSW	3.8
	8	1.7	SE	3.9	1.3	E	3.7
	9	2.1	SSE	4.7	2.3	ESE	4.5
	10	1.7	SSE	4	1.3	SW	3.1
	11	1.7	SE	4.8	1.6	SW	4.5

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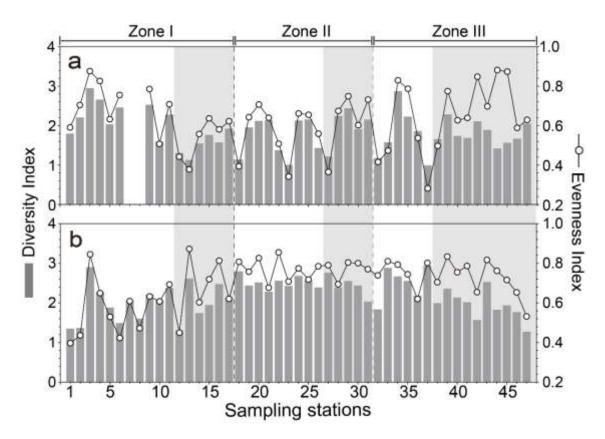
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**Fig. S1.** The compositions of phytoplankton genus in (a) June and (b) August.



**Fig. S2.** Precipitation in (*a*) Zone I and (*b*) Zone III from 1 May to 10 August of 2016. The areas of the diagonal line indicate the studied periods.



**Fig. S3.** Diversity index and evenness index for phytoplankton (Shannon and Weaver 1963) in (a) June and (b) August. Each zone is separated by a dotted line and shaded areas, indicating the offshore area of each zone respectively. There is not significant differences in phytoplankton abundance among the three zones in one-way ANOVA with Tukey's test (P = 0.05).

## Reference

Shannon, C. E., and Weaver, W. (1963). 'The Mathematical Theory of Communication. 1949.' (University of Illinois Press: Urbana, IL, USA.)