

1 **Supplementary Information**

2 **The algicidal bacterium *Kordia algicida* shapes a natural plankton community**

3 **Arite Bigalke^{1*}, Nils Meyer^{1*}, Lydia Papanikolopoulou¹, Karen Helen Wiltshire^{2,3}, Georg**
4 **Pohnert^{1,4#}**

5 * contributed equally

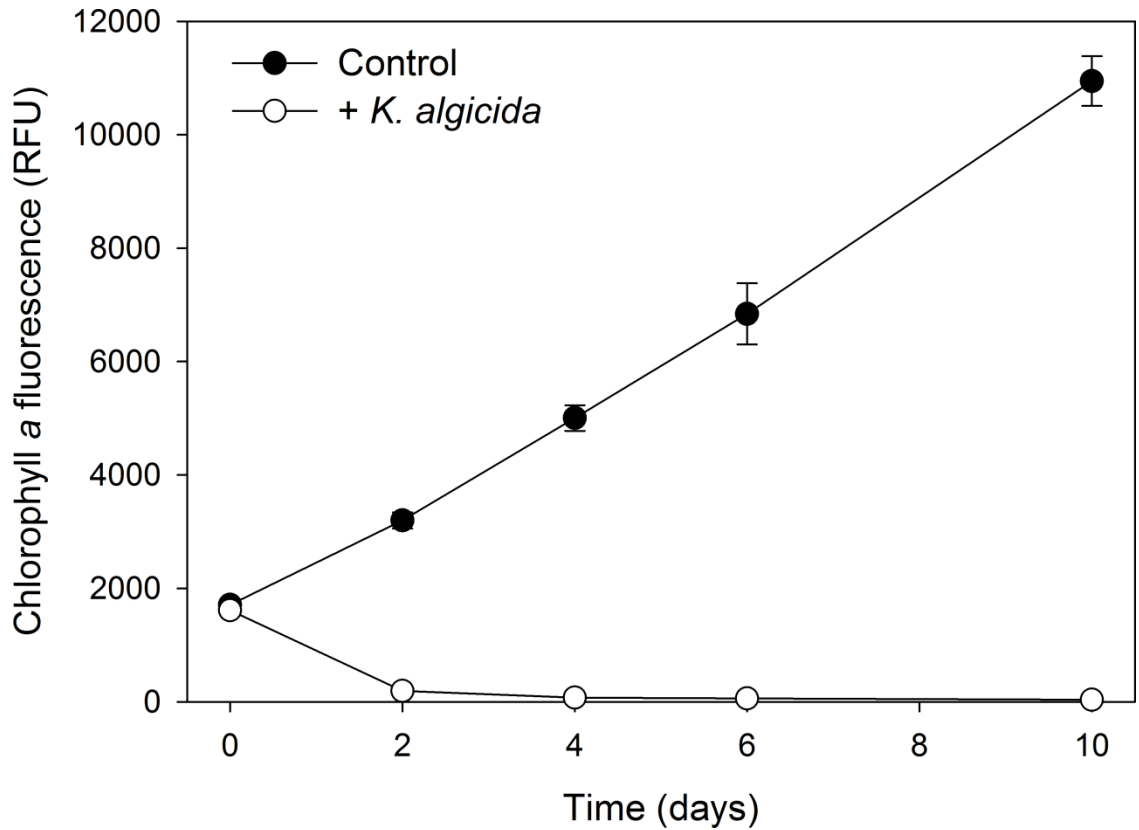
6 ¹Institute for Inorganic and Analytical Chemistry, Bioorganic Analytics, Friedrich Schiller
7 University Jena, Lessingstrasse 8, D-07743 Jena, Germany

8 ²Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung, Biologische
9 Anstalt Helgoland, P.O. Box 180, 27483, Germany

10 ³Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung, Biologische
11 Anstalt Helgoland, Wadden Sea station, 25992, List, Germany

12 ⁴Max Planck Institute for Chemical Ecology, Hans Knöll Str. 8, D-07745 Jena, Germany

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 15 **Fig. S1** *Chaetoceros socialis* mono culture in laboratory experiment. Cultures of *C. socialis* (40
 16 ml, n=3) are grown in the presence (“+ *K. algicida*”, final OD₅₅₀ 0.01) or absence (“Control”) of
 17 *Kordia algicida*.

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 19 **Table S1:** Statistics for stability of chlorophyll *a* fluorescence in control treatments. Given are p-
 20 values from Bonferroni *post-hoc* test after one-way ANOVA (P = 0.018).

comparison	p-value
day 0 vs. day 1	1.000
day 0 vs. day 2	1.000
day 0 vs. day 3	0.219
day 0 vs. day 4	1.000
day 0 vs. day 5	1.000
day 0 vs. day 6	0.950
day 0 vs. day 7	1.000
day 0 vs. day 8	1.000

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23 **Table S2:** Statistics for stability of phytoplankton cell counts in control treatment. One-way
24 ANOVA for *Phaeocystis* sp. cell counts displayed significant differences within the dataset ($P <$
25 0.001). *Chaetoceros socialis* cell counts were not significantly different in one-way ANOVA (P
26 $= 0.176$). Given are p-values from Bonferroni *post-hoc* test of *Phaeocystis* sp.

comparison			p-value
day 0	vs.	day 2	1.000
day 0	vs.	day 4	0.070
day 0	vs.	day 6	1.000
day 0	vs.	day 8	< 0.001

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29 **Table S3:** Statistical analysis of differences in chlorophyll *a* fluorescence between treatments.
 30 Given are two-tailed p-values from an unpaired t-test.

constant	Comparison		p-value
day 0	control	vs. low <i>Kordia</i>	0.129
	control	vs. high <i>Kordia</i>	0.792
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.183
day 1	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.315
day 2	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.600
day 3	control	vs. low <i>Kordia</i>	0.003
	control	vs. high <i>Kordia</i>	0.003
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.270
day 4	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.081
day 5	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.047
day 6	control	vs. low <i>Kordia</i>	no normal distribution
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.008
day 7	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.007
day 8	control	vs. low <i>Kordia</i>	< 0.001
	control	vs. high <i>Kordia</i>	< 0.001
	low <i>Kordia</i>	vs. high <i>Kordia</i>	0.074

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33 **Table S4:** Statistical analysis of differences in phytoplankton cell counts (*Chaetoceros socialis*
 34 and *Phaeocystis* sp.) between treatments. Given are two-tailed p-values from an unpaired t-test.

species	constant	comparison			p-value
<i>C. socialis</i>	day 0	control	vs.	low <i>Kordia</i>	0.463
		control	vs.	high <i>Kordia</i>	0.474
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.929
	day 2	control	vs.	low <i>Kordia</i>	0.153
		control	vs.	high <i>Kordia</i>	0.103
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.907
	day 4	control	vs.	low <i>Kordia</i>	0.022
		control	vs.	high <i>Kordia</i>	0.002
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.329
	day 6	control	vs.	low <i>Kordia</i>	<0.001
		control	vs.	high <i>Kordia</i>	0.005
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.936
day 8	control	vs.	low <i>Kordia</i>	0.007	
	control	vs.	high <i>Kordia</i>	0.006	
	low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.261	
<i>P. globosa</i>	day 0	control	vs.	low <i>Kordia</i>	0.697
		control	vs.	high <i>Kordia</i>	no normal distribution
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.240
	day 2	control	vs.	low <i>Kordia</i>	0.064
		control	vs.	high <i>Kordia</i>	<0.001
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.504
	day 4	control	vs.	low <i>Kordia</i>	0.577
		control	vs.	high <i>Kordia</i>	0.106
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.735
	day 6	control	vs.	low <i>Kordia</i>	0.016
		control	vs.	high <i>Kordia</i>	0.048
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.354
	day 8	control	vs.	low <i>Kordia</i>	0.047
		control	vs.	high <i>Kordia</i>	0.009
		low <i>Kordia</i>	vs.	high <i>Kordia</i>	0.920

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37 **Table S5** Statistical analysis of total bacterial abundances. One-way ANOVA within low *Kordia*
 38 treatment ($P = 0.033$) and high *Kordia* treatment ($P = 0.012$) over time displayed significant
 39 differences. In control mesocosms bacterial abundance was not significantly different between
 40 time points in one-way ANOVA ($P = 0.075$). Given are p-values from Bonferroni *post-hoc* test.

treatment	comparison			p-value
low <i>Kordia</i>	day 0	vs.	day 2	0.036
	day 0	vs.	day 4	0.034
	day 0	vs.	day 6	0.032
	day 0	vs.	day 8	0.247
high <i>Kordia</i>	day 0	vs.	day 2	0.037
	day 0	vs.	day 4	0.163
	day 0	vs.	day 6	0.621
	day 0	vs.	day 8	0.005

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 42 **Table S6** Statistical analysis of DOC concentrations. One-way ANOVA within high *Kordia*
 43 treatment ($P = 0.005$) and *Kordia* in sterile-filtered seawater ($P < 0.001$) over time displayed
 44 significant differences. In control mesocosms DOC concentration was not significantly different
 45 between time points in one-way ANOVA ($P = 0.064$). Given are p-values from Holm-Sidak *post-*
 46 *hoc* test.

treatment	comparison			p-value
high <i>Kordia</i>	day 0	vs.	day 4	0.010
	day 0	vs.	day 8	0.004
<i>Kordia</i> in sterile- filtered seawater	day 0	vs.	day 4	< 0.001
	day 0	vs.	day 8	< 0.001

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49 **Table S7** Statistical analysis of phosphate concentrations. ANOVA on Ranks within *Kordia* in
 50 sterile-filtered seawater over time displayed significant differences ($P = 0.025$). Within control
 51 mesocosms ($P = 0.929$) and high *Kordia* treatments ($P = 0.086$) phosphate concentration was not
 52 significantly different between time points in ANOVA on Ranks. Given are p-values from Tukey
 53 *post-hoc* test.

treatment	comparison			p-value
<i>Kordia</i> in sterile-	day 0	vs.	day 4	0.822
filtered seawater	day 0	vs.	day 8	0.207

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55 **Table S8** Statistical analysis of ammonium concentrations. One-way ANOVA within high
 56 *Kordia* treatment over time displayed significant differences ($P = 0.014$). Given are p-values from
 57 Holm-Sidak *post-hoc* test.

treatment	comparison			p-value
high <i>Kordia</i>	day 0	vs.	day 4	0.022
	day 0	vs.	day 8	0.011

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