

Drivers of protistan community autotrophy and heterotrophy in chemically stratified Antarctic lakes

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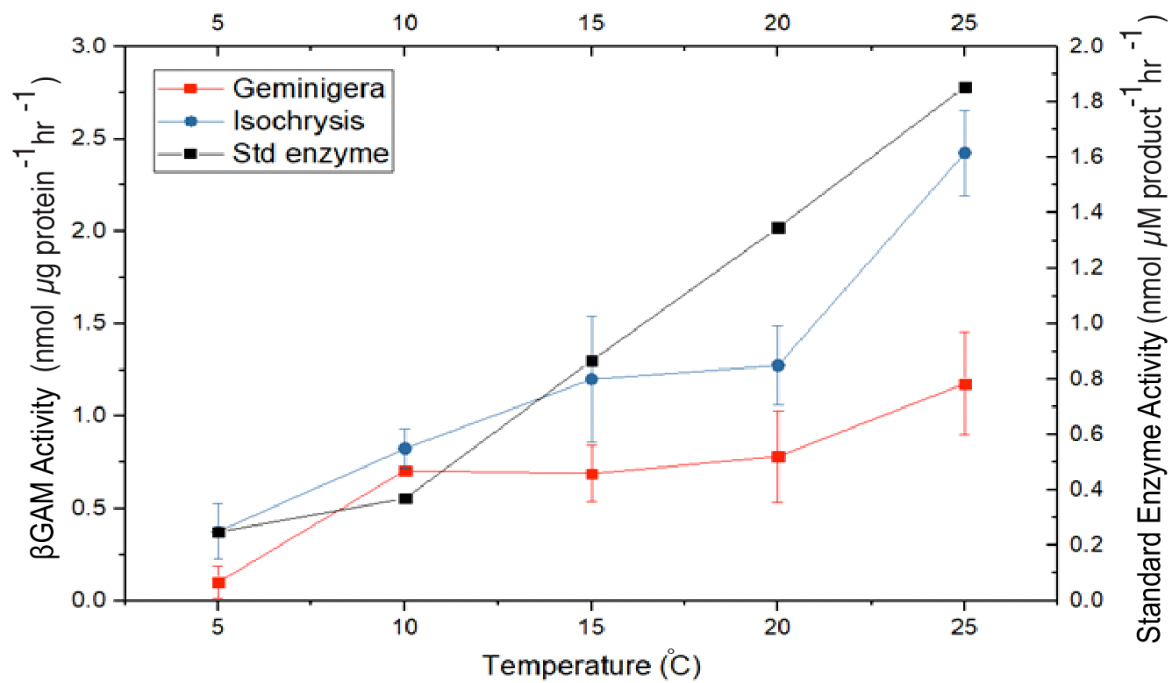


Figure S1. Temperature dependence of βGAM enzyme activity in *Isochrysis sp.* MDV and *Geminigera cryophila* (CCMP 2564) cultures.

Table S1. Comparison of β GAM activities in cultures of psychrophilic algae, *Isochrysis* sp. MDV, *Geminigera cryophila* (CCMP 2564) and *Chlamydomonas* sp. ICE-MDV at 20°C. *Isochrysis* and *Chlamydomonas* were isolated from Lake Bonney.

Organism	Enzyme activity (nmol ug protein ⁻¹ hr ⁻¹)	
	Autotrophic (F/2 or L1)	Mixotrophic (5% cereal grass added)
<i>Isochrysis</i> sp. MDV (Haptophyte)	1.275	3.100
<i>Geminigera cryophila</i> (Cryptophyte)	0.782	0.766
<i>Chlamydomonas</i> ICE-MDV (Chlorophyte)	0.00	n/a

Table S2. Results of PCA of environmental parameters: loadings of first 3 principal component

	PC 1	PC 2	PC 3
PAR	-0.44034	-0.0073412	0.40697
T	0.128	0.83605	0.45016
NH ₄	0.52943	0.76842	-0.15049
NO ₃	0.55079	-0.09419	0.65851
PO ₄	0.10782	0.63944	-0.51781
N:P	0.93291	-0.21126	0.093327
DIC	0.56396	-0.28976	-0.68411
Cond	0.88195	-0.19688	0.21897