

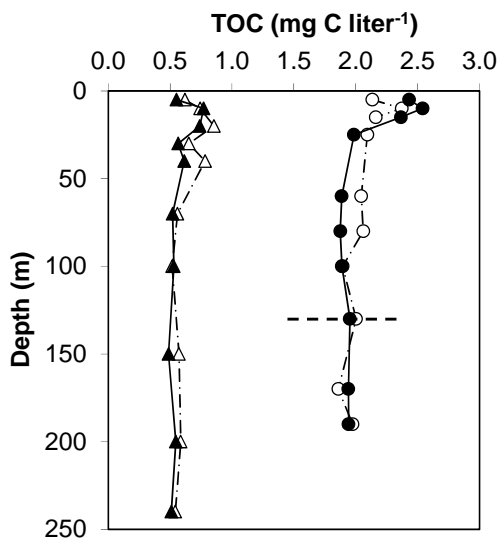
# Bacterial Chitin Hydrolysis in Two Lakes of Contrasting Trophic Status

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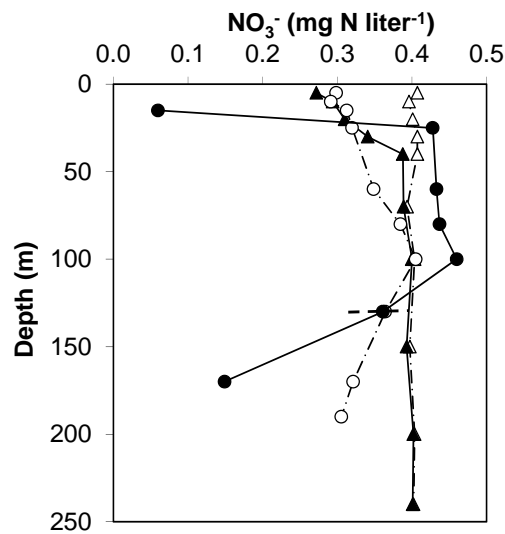
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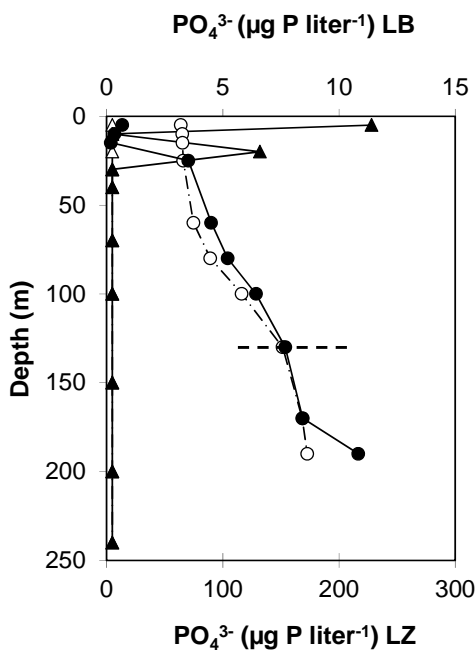
a)



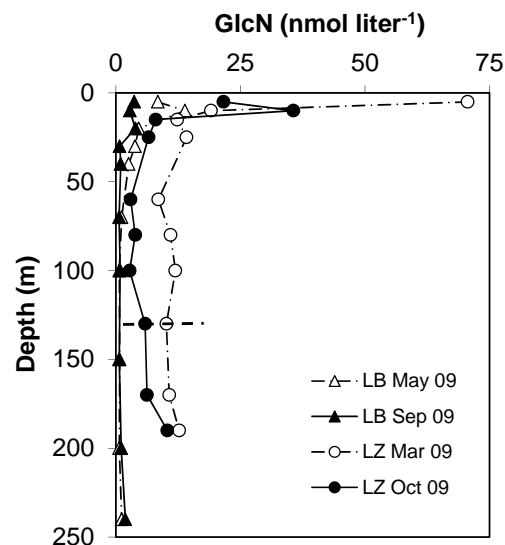
b)



c)



d)



—△— LB May 09  
—▲— LB Sep 09  
—○— LZ Mar 09  
—●— LZ Oct 09

FIG. S1. Water column properties of Lake Brienz (LB) and of Lake Zug (LZ) sampled in spring and fall 2009 as a function of depth. (a)  $\text{TOC} \pm 0.2 \text{ mg C liter}^{-1}$ , (b)  $\text{NO}_3^- \pm 0.02 \text{ mg N liter}^{-1}$ , (c)  $\text{PO}_4^{3-} \pm 0.5 \text{ } \mu\text{g P liter}^{-1}$ , errors given are standard deviations of measurement, (d) particulate glucosamine (GlcN) in  $\text{nmol liter}^{-1}$  of water. Standard deviation of GlcN measurement was below 10%. Bold dashed lines mark border between oxic and anoxic water body of LZ.

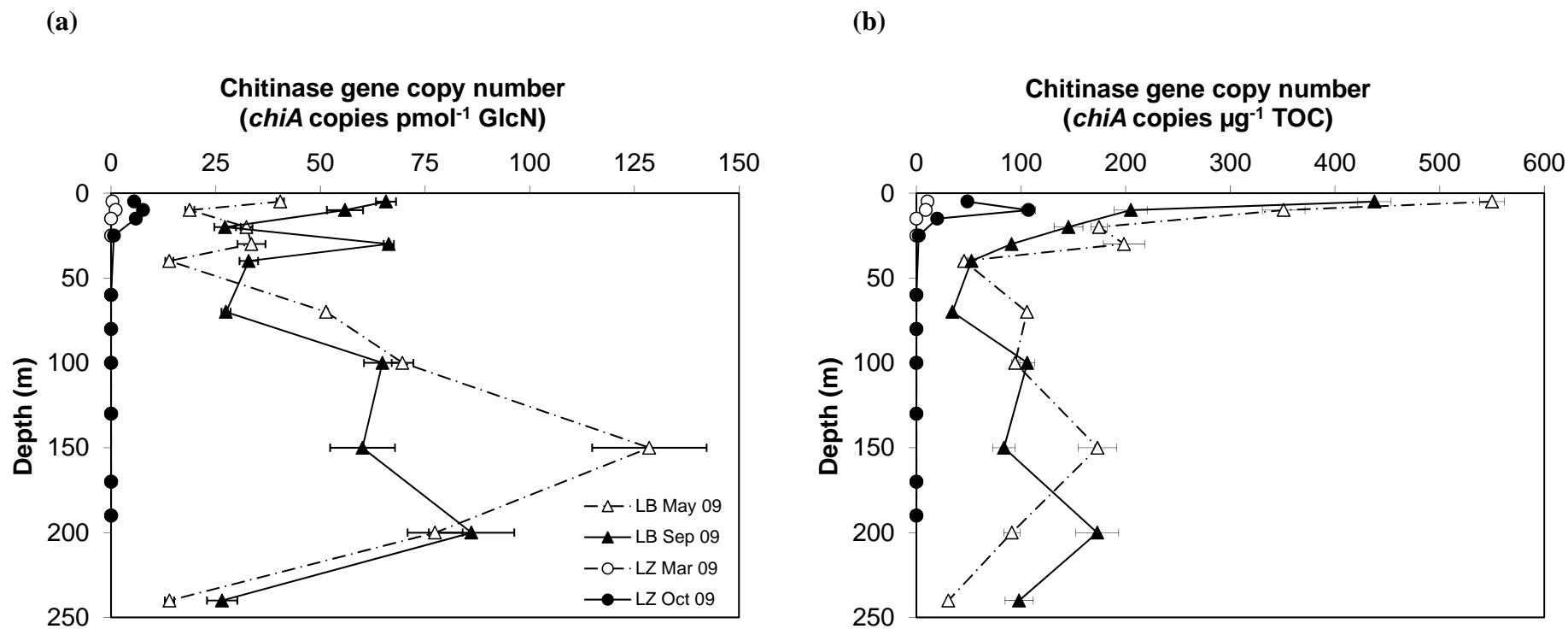
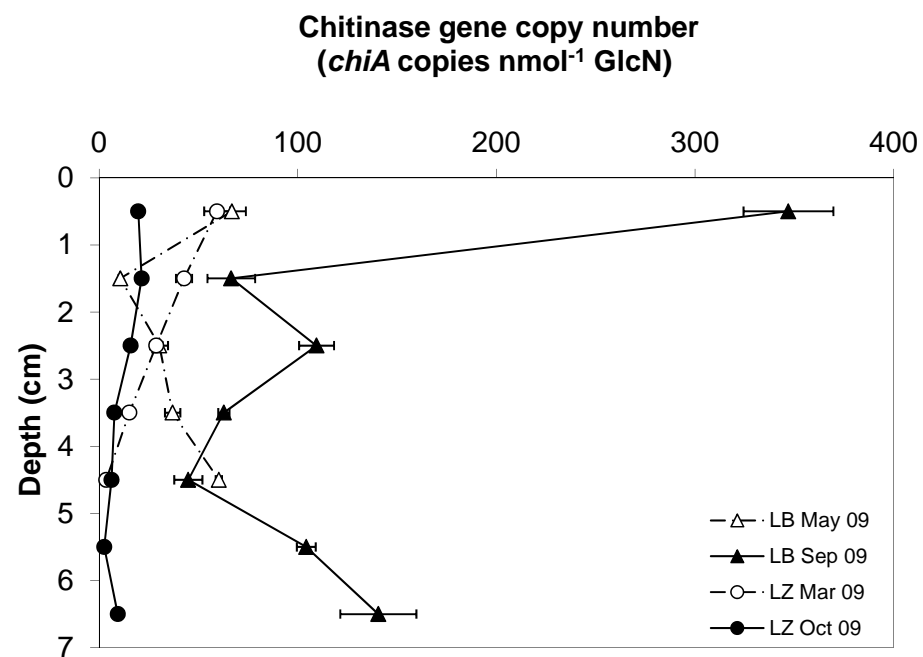


FIG. S2. *ChiA* gene copy number in the water columns of Lake Brienz (LB) and Lake Zug (LZ). (a) *chiA* copies per pmol glucosamine, (b) *chiA* copies per µg organic carbon. Error bars represent ± standard deviation of triplicate measurements of one sample.

(a)



(b)

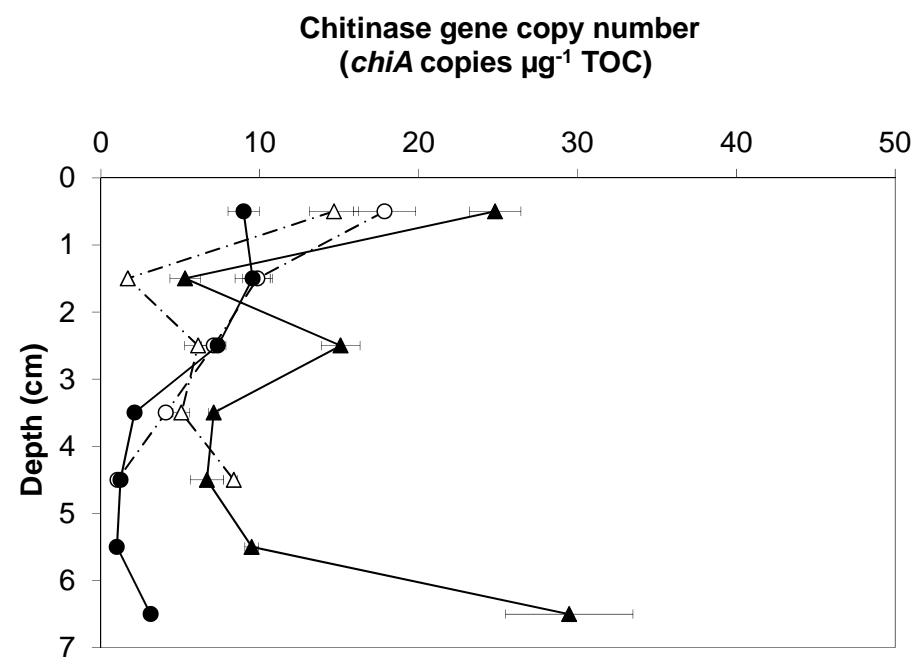


FIG. S3. *ChiA* concentration per nmol glucosamine (a) and per  $\mu\text{g}$  organic carbon (b) of Lake Brienz (LB) and Lake Zug (LZ). Error bars represent  $\pm$  standard deviation of triplicate measurements of one sample.