The exact cause for the success of *Vicicitus globosus* under high $CO_2$ conditions has not been identified yet. Either the alga benefits disproportionately compared to other competing species in terms of its growth rate, for example through increased photosynthesis under elevated $CO_2$. Or its toxicity increases with rising $CO_2$, so that it is eaten less. "Resolving this question takes further detailed analyses in the laboratory," explains Riebesell.

It is uncertain also whether the results of this study can be transferred to other toxic algae species. Still, *Vicicitus globosus* is distributed widely, from temperate regions to the tropics. Blooms of this species have repeatedly been associated with fish mortality in coastal waters and aquacultures. "This is the first evidence from a field study that ocean acidification can promote toxic algal blooms. Another strong reason for rapidly reducing $CO_2$ emissions," Professor Riebesell summarises the new findings.

**Please note:**
Besides GEOMAR, the Biological Station Trondheim of NTNU (Trondheim, Norway), the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research in Bremerhaven, the Instituto de Oceanografía y Cambio Global (IOCAG, Las Palmas, Spain), the Medical University Wenzhou (Wenzhou, China) and the University of Southern Denmark (Odense, Denmark) participated in the study. The experiment was supported by the Plataforma Oceánica de Canarias (PLOCAN). The project was funded by the Federal Ministry of Education and Research within the BIOACID joint project (FKZ 03F06550).

**Reference:**
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**Links:**
www.geomar.de GEOMAR Helmholtz Centre for Ocean Research Kiel
www.oceanacidification.de website about ocean acidification

**Images:**
At www.geomar.de/n6200-e images are available for download.

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