



News & Comments Diatom Population is Threatened by Ocean Acidification

Abdul Khadir Nabeel

Researchers have discovered that these tiny microalgae don't end up winning the acidification game after all.

Historically, diatoms have been thought to be more resistant to acidification than some of their aquatic counterparts, whose silicon-containing shells have been more resistant to acid than the carbonates found in shellfish and corals.

Researchers have shown for the first time that diatoms are nevertheless under threat they used a combination of analysis of multiple data sources and models to carry out the study. Ocean acidification is now being assessed as a global issue.

"We used diatoms as an example to show how small-scale impacts can have big consequences for ocean ecosystems and matter cycles," says Taucher, lead author of the study.

"Diatoms are one of the most important groups of plankton in the ocean, so their decline could drastically alter the marine food web or even impact the ocean's role as a carbon sink." Diatoms do not appear to be welcome in the oceans of the year 2100 based on current trends.

"Already by the end of this century, we expect a loss of up to 10% of diatoms," says Taucher. "That's immense when you consider how important they are to live in the ocean and the climate system. It is, therefore, high time to reconsider global warming for the survival of creatures living in the ocean.

KEYWORDS

Bio-oceanography, climate-change impacts, global warming, element cycles, marine biology, marine chemistry, diatoms, algae, ocean acidification, ocean

