Research Highlights

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Poisonous cure

Olive Heffernan

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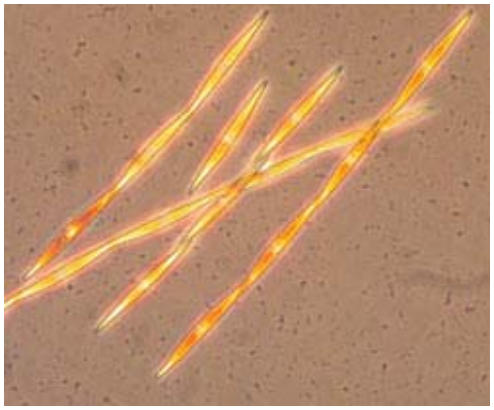

NOAA

Plans to counteract climate change by boosting the growth of oceanic algae could contaminate the ocean with deadly levels of a neurotoxin, say scientists. Although previous studies have shown that oceanic species of the genus *Pseudo-nitzschia* are harmless, new research finds that these species can, in fact, produce the neurotoxin domoic acid and that their toxicity is enhanced in iron-enriched waters.

Charles Trick of the University of Western Ontario in London, Ontario, and colleagues studied the ability of *Pseudo-nitzschia* species in the sub-Arctic North Pacific Ocean to produce domoic acid under normal and iron-enriched conditions. They found that *Pseudo-nitzschia* species produce domoic acid even as part of their normal physiology during spring and that adding iron to the ocean favours the growth of these species. Once domoic acid is present in the water column, it too enhances *Pseudo-nitzschia* growth, found the researchers.

The authors suggest that large-scale ocean fertilization could result in toxin levels as high as one to two micrograms of domoic acid per litre, enough to cause widespread amnesic shellfish poisoning in humans and acute toxicity in seabirds and marine mammals.

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