

# Iron Sources for Marine Phytoplankton Growth

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**RESEARCH QUESTION:** Could continental weather have been a major source of iron that stimulated phytoplankton carbon sequestration events during the glacials?

## BACKGROUND:

- The Martin Hypothesis predicts that flux of iron carrying dust to iron deficient High-Nutrient, Low-Chlorophyll regions caused phytoplankton blooms that resulted in a 25% decrease in atmospheric CO<sub>2</sub> during glacial maxima.

## METHODS:

- Species of diatoms were incubated on iron minerals types typical of continental weathering to test continental weathering's suitability as an iron source.

## RESULTS

- The iron minerals stimulated growth whose rate and magnitude varied within species, depending on the mineral type used, and between species.

