

## Seaweed Study

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Seaweeds that live beneath the Arctic ice and their relatives from tepid tropical seas are being studied in the field by The University of California's Scripps Institution of Oceanography in an effort to determine the methods by which similar organisms have adjusted to very dissimilar environments.

Francis T. Haxo, Associate Professor of Biology, recently returned to La Jolla after spending several months with a field party that worked in Vietnam and Australia under the auspices of the Public Health Service.

At Thursday Island, Australia, Haxo studied the temperature resistance of algae found in the shallow waters of Torres Straits, the year-round temperature there is about 85 degrees. The seaweeds rapidly lost their ability to carry on photosynthesis in cooler waters. In fact, one group of calcareous algae, seaweeds which form coral-like deposits, suffered cold shock after only a brief exposure to waters of 50 degrees Fahrenheit; the effect was as devastating as a hard frost on land plants.

These results contrast sharply with those Haxo obtained on a trip to Labrador last year. There, in March, he found seaweeds carry on photosynthesis under three feet of solid ice. The water surrounding the plants was near its freezing point. The Arctic seaweeds seem to be able to withstand a greater range of temperature; samples brought back to the laboratory reached their maximum productivity at around 50 degrees Fahrenheit.