Detects Poison In Shellfish

A procedure for detecting the presence in shellfish of saxitoxin — the paralytic shellfish poison sometimes associated with the so-called "red tide" blooms on the west coast — one hundred times more sensitive than any previous method has been devised by NOAA Sea Grant chemists at the Berkeley campus of the University of California.

"We are hopeful," said Dr. Robert B. Abel, Director of the National Oceanic and Atmospheric Administration's Office of Sea Grant, "that this new technique may be used to prevent the unnecessary closing

of shellfish areas.

"It should allow for the specific, rapid, and reliable inspection of shellfish for toxicity and be a much more desirable substitute for the present method of closing areas by calendar."

The new technique, developed under the sponsorship of NOAA's Office of Sea Grant which is part of the Commerce Department, involves a chemical analysis of the shellfish that could provide a more scientific approach to the

problem of paralytic shellfish poison than seasonal closings.

Meat from the suspected animals is ground up and subjected to a series of relatively simple steps to extract any saxitoxin which may be present.

The amount of saxitoxin, if any, can then be determined using a standard laboratory instrument called a fluourescence

spectrophotometer.

"The procedure is so straightforward," claims Dr. Henry Rapoport, leader of the Sea Grant group at the University of California's Berkeley campus, "and the equipment needed so uncomplicated, that testing can be carried out on board a ship or in a small van on shore. The results are immediate and a decision can be made on the spot whether or not to harvest."