TECHNOLOGICAL RESEARCH IN SERVICE LABORATORIES

Seattle, Wash.

Sample lots of precooked oyster stew and creamed oysters prepared at this laboratory were found to be in excellent condition after one month's frozen storage. Dilution by drip will make it necessary to modify the tomato sauce used in the test runs of frozen oyster cocktail, however. It was also found that cooked oysters gave a much more satisfactory frozen cocktail than raw oysters.

Two antibiotics were tried as means of slowing decomposition of fish. The antibiotics had little effect in dips, but when added to a solution in which the fish were stored, these materials did enhance the keeping quality.

Fish frozen last summer in Southeastern Alaska by a commercial company were cooperatively examined and graded.

Dr. Belle A. Stevens, Department of Animal Biology, University of Washington, was assisted in making photographs of Southeastern Alaska shrimps. Dr. Waldo Schmitt of the Smithsonian Institution will identify the various species so as to clear up present confusion in the usage of their common names.

Work has been progressing on the design of a mechanical molding device for packaged frozen fish and on an adapter to be used in the spectrophotometric analysis of vitamin A.

The Smaller War Plants Corporation received help in the evaluation of the prospectus of a concern proposing to can king crab and salmon in Alaska.

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College Park, Md.

The research dealing with the utilization of various anti-oxidants in packaged fish is progressing, and in the near future, definite information and recommendations



should be available. Fatty fish are the most difficult fish to store frozen over long periods of time, because the fats tend to combine with the oxygen of the air in the freezer and thus become rancid. Losses of considerable quantities of fish each year are due to such rancidity. If a method is developed which can be applied to fatty fish to prevent oxidation, it will save many thousands of pounds of fatty fish each year.

The studies dealing with the bleeding of freshshucked oysters were completed, and a report is

being prepared. This report will be presented at the hearings before the Food and Drug Administration on January 15. The information was obtained to ascertain whether or not the limitations on moisture content included in the proposed Food and Drug regulations allowed sufficiently for the actual bleeding of the freshshucked oysters.

Some studies have been begun dealing with the use of the micro-biological assay methods for determining the amounts of B-complex vitamins in fishery products.

Tested recipes were supplied to the National Fisheries Institute to be included in the Institute's series of radio broadcasts. Advice was given on the program of technological investigation which the State of Maryland plans to sponsor.

Mayaguez, Puerto Rico

At the end of the month, a shipment of reputedly poisonous fish (<u>Caranx</u> species) was received from a San Juan fish dealer. These specimens will undergo further examination.

Ketchikan, Alaska

Analyses of locally available herring indicated that these fish contained an average of 15.4 percent oil, but that only a little over 9 percent was extractable by normal industrial processes.

Work was continued on the determination of the filleting characteristics of rockfish and was also extended to flounders and sea bass.

Scarcity of king crabs prevented an early beginning of the investigation into the possibility of freezing this product. Shrimp frozen alive in salt water were shipped by air from Petersburg to Ketchikan and thence to Seattle.

Data on sablefish landings were supplied to the office of the Allocator in Seattle.

A committee appointed by the Board of Regents of the University of Alaska visited the fishery laboratory and received information on how the laboratory could cooperate in an extension of the University's activities to Southeastern Alaska.