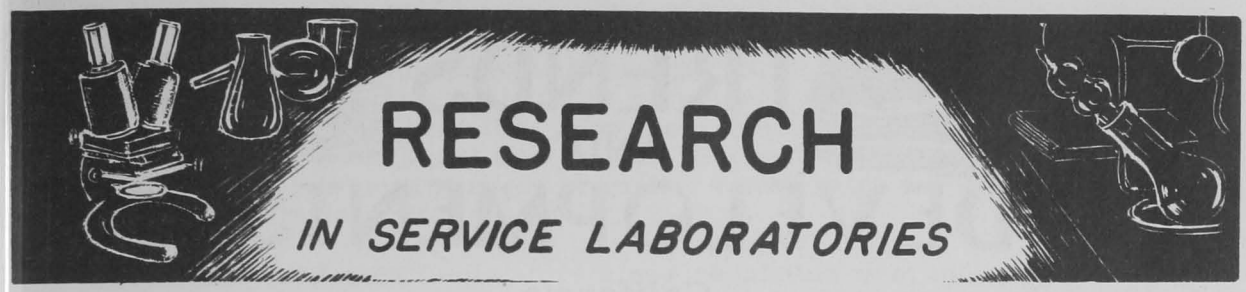

FLUORESCENCE NOT A QUALITY INDEX OF OCEAN PERCH OR HADDOCK

Fluorescence of the eyes or of the other parts of ocean perch and of haddock have, contrary to popular opinion, little, if any, relationship to the freshness of these fish, according to studies conducted at the Service's Boston Technological Laboratory.

In the studies on the ocean perch, whole fish were stored in a chilled room at 40° to 45° F. and examined regularly under ultraviolet light for fluorescence. Fifty percent of the ocean perch--while still of marketable quality--developed bright yellow fluorescence of the eyes. The eyes of the remaining ocean perch did not fluoresce, even after becoming putrid. No other signs of fluorescence that could be related to quality were detected. Thus the presence or absence of fluorescence is not a reliable index of the quality of ocean perch.

In the studies on the haddock, the fish were eviserated, stored well iced in boxes in a chilled room at 35° to 37° F., and examined frequently for fluorescence. At the initial examination, 12 percent of the haddock showed a slight yellow fluorescence of one eye. After 5 days on ice three fish were still of good quality, but the eyes of all of them were fluorescent, and about 30 percent of the eyes fluoresced very strongly. On the thirteenth day of iced storage, at which time the haddock were of borderline quality, 90 percent of the eyes fluoresced strongly. The ventral fins of more than 50 percent of the haddock developed fluorescence during storage, but the intensity of fluorescence was not marked.

At each examination, two haddock were filleted. Those of fair quality developed a bright yellow fluorescence on one or two of the four fillets examined. Fluorescence, however, was not found on all of the fillets even after they had become inedible.

The results of these tests show that fluorescence is not a reliable index of the quality of either ocean perch or haddock.

GLAZING SHRIMP

Shrimp submerged in a solution of equal parts of salt and dextrose before quick freezing have an excellent glaze, look fresh when thawed, and do not adhere to each other when frozen.

Food Field Reporter, Oct. 3, 1955.