SCIENCE INFORMATION EXCHANGE
SMITHSONIAN INSTITUTION
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WASHINGTON, D.C. 20036

ZUH-3435

NOTICE OF RESEARCH PROJECT

SUPPORTING AGENCY:

INTERIOR DEPARTMENT
BUREAU OF SPORT FISH. & WLF.
FISHERY RESEARCH DIVISION

AGENCY'S NUMBER(S):

FR 2211-20

TITLE OF PROJECT:

UPTAKE AND BIOLOGICAL RESPONSE OF COHO SALMON TO AROCLOR 1254

PRINCIPAL INVESTIGATOR, ASSOCIATES AND DEPARTMENT, SPECIALTY:

PM MEHRLE FISH PESTICIDE RES LAB
BF GRANT
DL STALLING

RECIPIENT INSTITUTION:

U.S. DEPT. OF INTERIOR
BUR. OF SPORT FISH. & WILDLIFE
ROUTE #1
COLUMBIA, MISSOURI 65201

PERIOD FOR THIS NRP:

7/70 TO 6/71
FY71 FUNDS $9,000

SUMMARY OF PROJECT:

Coho salmon will be given diets containing Aroclor (PCB) 1254 for 6 months. Radiochlorine-labelled Aroclor 1254 will be used to assess the accumulation of PCB residues. Changes in composition of residues and possible degradation of Aroclor 1254 will be determined by radiometric assay and gas-liquid chromatography-mass spectrometry. Various physiological parameters of serum and liver samples will be studied in both exercised and non-exercised fish. The serum parameters will include glucose, lactate, pyruvate, NPN, amino acids, protein, cortisol, and electrolytes. Liver parameters will include glycogen concentration and active enzymes such as glutamate-oxaloacetate transaminase, glutamate-pyruvate transaminase, glutamate dehydrogenase, and PEP carboxylase. Radioiodine uptake by the thyroid as well as a general histopathological examination will be carried out.

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