SCIENCE INFORMATION EXCHANGE
SMITHSONIAN INSTITUTION
1730 M STREET, N.W. PHONE 202-381-5511
WASHINGTON, D.C. 20036

ZUH-3424

NOTICE OF RESEARCH PROJECT

SUPPORTING AGENCY:

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

AGENCY'S NUMBER(S):

FR 2221-7

TITLE OF PROJECT:

INTERACTION BETWEEN MICROORGANISMS AND PESTICIDES

PRINCIPAL INVESTIGATOR, ASSOCIATES AND DEPARTMENT, SPECIALTY:

BT JOHNSON FISH PESTICIDE RESEARCH LAB

RECIPIENT INSTITUTION:

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

PERIOD FOR THIS NO.:

7/70 TO 6/71
FY71 FUNDS $17,277

SUMMARY OF PROJECT:

Accumulation, retention and passage of polychlorinated pesticides in a freshwater food-chain are studied. Under controlled laboratory conditions experiments are performed with bacteria, algae, protozoa, crustacea, insects and fish using both labeled and non-labeled chlordan, toxaphene and methoxychlor alone and in conbination with the non-pesticidal polychlorinated Aroclor series of compounds. Both simple and complex food-chains are developed. Only environmental levels of the pesticides are used. Residue analysis at various trophic levels are made using several chromatography methods, liquid scintillation, autoradiography and mass spectroscopy. Evidence of biological magnification in the concentration of pesticides are explored.

MONS 096716