

SCIENCE INFORMATION EXCHANGE

SMITHSONIAN INSTITUTION
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WASHINGTON, D.C. 20036

ZUH-1423

NOTICE OF RESEARCH PROJECT

REPORTING AGENCY:

AGENCY'S NUMBER(S):

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

PR 2221-8

TITLE OF PROJECT:

THE EFFECT OF PESTICIDES ON PRIMARY PRODUCERS IN A FRESHWATER ECOSYSTEM
(ABBREV.)

PRINCIPAL INVESTIGATOR, ASSOCIATES AND DEPARTMENT/SPECIALTY:

BT JOHNSON

FISH PESTICIDE RES LAB

RECIPIENT INSTITUTION:

PERIOD FOR THE AID:

U.S. DEPT. OF INTERIOR
BUR. OF SPORT FISH. & WILDLIFE
ROUTE #1
COLUMBIA, MISSOURI 652017/70 TO 6/71
FY71 FUNDS \$11,518

SUMMARY OF PROJECT:

Axenic phytoplankton cultures are exposed to different insecticides and herbicides, alone and in combination at environmental concentrations. The polychlorinated biphenyl Aroclor series are studied also in conjunction with pesticides.

Effects on photosynthesis are measured by changes in C14-uptake using a liquid scintillation method. Biomass is determined by direct cell count, dry weight and ATP content. ATP is quantitatively determined utilizing the luciferin-luciferase enzyme system.

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