

RONALD L STUCKEY
DEPT OF BOTANY & PL PATH
OHIO STATE UNIV
1735 NEIL AVE
CAMPUS
OAS-JS

THE OHIO JOURNAL OF
SCIENCE

SEPTEMBER
1967

- Geographic Aspects of the Agriculture of Santa
Catarina State, Brazil... *Allen G. Noble* 257
- Spatial and Seasonal Distribution of Plank-
tonic Cladocera in a Small Reservoir
Robert W. Winner and James F. Haney 274
- A Computer Program to Calculate Expected
Frequencies and to Estimate Per Cent Re-
combination in a Dihybrid F_2 With Linkage
in the Coupling Phase and Various Types
of Lethal Inheritance
Russell V. Skavaril and Elton F. Paddock 289
- A Devonian Brachiopod With Epifauna
R. D. Hoare and D. L. Steller 291
- Tegmen Roof of *Plaxocrinus mooresi*
(Whitfield)..... *J. J. Burke* 298
- An Autoradiographic Study of Invertebrate
Uptake of DDT- CL^{36} *Edward J. Webster* 300
- A Review of the Effects of Plant Estrogenic
Substances on Animal Reproduction
David E. Samuel 308
- Oviposition Behavior in Two Species of
Dragonflies..... *Allen M. Young* 313
- The Barn Owl as a Red-Winged Blackbird
Predator in Northwestern Ohio
Michael L. Carpenter and Michael W. Fall 317
- Books Reviews 290, 297, 307, 312, 316, 318, 319, 320

THE OHIO JOURNAL OF SCIENCE

Published jointly by The Ohio State University and The Ohio Academy of Science.

JOURNAL STAFF

JANE L. FORSYTH.....Editor-in-Chief

EMANUEL D. RUDOLPH.....Book Review Editor

JOINT ADMINISTRATIVE BOARD

For The Ohio State University: EARLE R. CALEY, CARROLL A. SWANSON

For The Ohio Academy of Science: CHARLES A. RANDALL, WILLIAM A. RICE

Secretary-Treasurer to the Board: DAVID H. STANSBERY

EDITORIAL ADVISORY COMMITTEE

Zoology: DAVID H. STANSBERY Medical Sciences: SUE L. MAYER

Plant Sciences: ROBERT S. PLATT, JR. Physics: WAVE H. SHAFFER

Geology: MYRON T. STURGEON Chemistry: JAMES D. CRUM

Anthropology: RAYMOND S. BABY

MANUSCRIPTS: *The Ohio Journal of Science* considers manuscripts on any scientific subject from contributors anywhere. The manuscripts may be papers or notes on recent research or symposia on subjects of scientific interest. Every paper is critically reviewed by at least one and usually two reviewers, and is subject to the approval of the editorial staff. Two copies each, of manuscript and figures, should be submitted to the Editor. A carbon copy should be retained by the author for reading the galley proof. Galley proof and engraver's proof but not original manuscript will be sent to authors. See past numbers of the *Journal* and the *Style Manual for Biological Journals* for detailed instructions concerning the preparation of manuscripts.

REPRINTS: A price list for reprints and an order form are sent with proof. Authors should allow about sixty days after publication for receipt of reprints.

SUBSCRIPTIONS: Annual subscription, effective January 1, 1967, \$8.00 (foreign countries, \$8.50). Single numbers: current volume, \$1.50, back issues, \$2.00. Issued bimonthly, January to November, six issues per volume. *The Ohio Journal of Science* is sent without additional expense to all paid-up members of The Ohio Academy of Science.

MAILING ADDRESSES: The editorial offices of *The Ohio Journal of Science* are at the Geology Department, Bowling Green State University, Bowling Green, Ohio 43402. All manuscripts, illustrations, proofs, and correspondence dealing with editorial matters should be addressed to the editor, Dr. JANE L. FORSYTH, at this place. All correspondence dealing with subscriptions, changes of address, requests for old issues, and all remittances should be addressed to the Central Office of *The Ohio Journal of Science* at 505 King Avenue, Columbus, Ohio 43201. Failure to receive any number of the *Journal* must be reported to this office within three months of date of issue if claim is to be recognized. All correspondence dealing with the matters of business policy should be addressed to the Secretary-Treasurer, Dr. DAVID H. STANSBERY, Ohio State Museum, 15th and High Streets, Columbus, Ohio 43210. Office of the Book Review Editor, Botany Department, The Ohio State University, 1735 Neil Avenue, Columbus, Ohio 43210.

Printed by the Spahr & Glenn Company, Columbus, Ohio, U. S. A.

Entered as second-class matter November 1, 1915, at the post office at Columbus, Ohio under the Act of March 3, 1879.

Date of Issue—November 17, 1967