TABLE OF CONTENTS

A Cytological Analysis of a Naturally Occurring *Helianthus* Hybrid......................... *Robert W. Long, Jr.* 65

Notes on the Genus *Macrorhoptus* Leconte (Coleoptera: Curculionidae, Anthonominae)....................... *Elbert L. Sleeper* 70

The Hydrolysis of Sucrose, Lactose, and Cellobiose by Small Intestinal Mucosa *In Vitro.*

Relationship to Laxation in the Rat Produced by These Disaccharides *In Vivo.*.................... *Jessie E. Fischer and T. S. Sutton* 75

Pleistocene Molluscan Faunules of the Sidney Cut, Shelby County, Ohio....................... *Aurèle La Rocque and Jane Forsyth* 81

Range Extension of *Eumeces fasciatus* (Scincidae) Into Sandusky County, Ohio.................... *N. Wilson Britt* 90

The Insemination of Body Cavity and Oviducal Eggs of Amphibia........................................... *H. W. Aplington, Jr.* 91

Sound Production and Associated Behavior in Insects....................................................... *Richard D. Alexander* 101

The Carbonate Concretions of the Ohio Shale....................... *H. Edward Clifton* 114

Book Notices....................................................... 89, 99, 100, 113

PUBLISHED AT COLUMBUS, OHIO

by

THE OHIO STATE UNIVERSITY and THE OHIO ACADEMY OF SCIENCE

Issued Bi-monthly, January to December (six issues)

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—March 5, 1957
THE OHIO JOURNAL OF SCIENCE

EDITORIAL STAFF

HENRY L. PLAINE............................ Editor-in-Chief
RICHARD A. POPHAM......................... Business Manager
FRANK W. FISK............................... Book Review Editor

L. ESTEL. Anthropology and Sociology
J. H. BUCKINGHAM.............. Chemistry
C. V. RILEY.............. Conservation
L. B. KARNES.............. Geography
G. H. CROWL.............. Geology
J. J. JACOBY.............. Medical Sciences

J. W. McGRAHTH........... Physics and Astronomy
G. W. BURNS........... Plant Sciences
C. KENNEY........... Science Education
P. J. SEYLER........... Zoology
D. S. DEAN ....... Subsection on Genetics

JOINT ADMINISTRATIVE BOARD

For Ohio State University: BERNARD S. MEYER, EDMUND M. SPIEKER
For Ohio Academy of Science: CHARLES E. HOEL, ARTHUR W. LINDSEY

MANUSCRIPTS. THE OHIO JOURNAL OF SCIENCE accepts manuscripts on any scientific subject from contributors living anywhere in the world. The manuscripts may be reports of recent research, review or expository articles, or part of a symposium on a subject of general scientific interest. All manuscripts are subject to approval by the editorial staff. One original copy only need be submitted to the Editor. A carbon copy should be retained by the author in case of loss of the original and for reading the galley proof. Galley proof and engraver's proof but not original manuscript will be sent to authors. Care should be taken to furnish a correct mailing address. See cover page 3 for detailed instructions concerning the preparation of manuscripts.

PREPUBLICATION REVIEW AND REVISION. Every paper is read and criticized by a reviewer. The author is subsequently given an opportunity to revise the paper in accordance with the reviewer's suggestions. This procedure is not intended to imply any reflection on the merits of individual papers but is solely for the purpose of improving the quality of articles appearing in the Journal and to reduce publication costs.

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

SUBSCRIPTIONS. Annual subscription, $6.00, (foreign countries, $6.50). Single numbers, $1.00. One volume appears each year and contains six numbers. THE OHIO JOURNAL OF SCIENCE is sent without additional expense to all paid-up members of THE OHIO ACADEMY OF SCIENCE.

MAILING ADDRESS. All manuscripts, illustrations, proofs, and correspondence dealing with editorial matters should be addressed to the editor, Dr. Henry L. Plaine, Botany and Zoology Building, The Ohio State University, Columbus 10, Ohio. All remittances and correspondence dealing with subscriptions and other business matters should be addressed to the business manager, Dr. Richard A. Popham, Botany and Zoology Building, The Ohio State University, Columbus 10, Ohio. Failure to receive any number of the JOURNAL must be reported within three months of date of issue if claim is to be recognized.

Printed in the United States of America by the Spahr & Glenn Company, Columbus, Ohio